BLM LIBRARY
88045145

U.S. Department of the Interior
Bureau of Land Management
Vale District
Jordan Resource Area
100 Oregon Street
Vale, Oregon 97918

DRAFT

May 1992

Wild and Scenic River Management Plan/ Environmental Assessment for the Main, West Little and North Fork Owyhee Rivers

F
882
.08
W553
1992

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM-OR-AE-92-21-1792

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER CO 80225

ID88045145

F
882
.08
W53
1992

EXECUTIVE SUMMARY

The Bureau of Land Management, through the Secretary of the Interior, was directed by the Oregon Omnibus Wild and Scenic Rivers Act to develop management plans for the West Little and North Fork Owyhee Rivers. At the same time the BLM, Vale District determined it was necessary to amend the Owyhee Wild River management plan developed in 1986 for management of the main stem in order to incorporate the acquisition of the Birch Creek and Morrison Ranches into the Owyhee Wild River management strategy and to solve other issues that had developed since the original plan. Since these three rivers (Main, West Little and North Fork Owyhee) are all federally designated wild rivers within the National Wild and Scenic Rivers System and managed by the Jordan Resource Area of the Vale District, BLM would develop one management plan to direct and guide management of these important rivers.

Two segments of the Main Owyhee Wild River are also part of the Oregon State Scenic Waterway Program. Management considerations for the Owyhee state scenic waterway and federal wild river were developed through coordination between the BLM and the Oregon Parks and Recreation Department (managing entity for the state scenic waterway program).

Scoping meetings in 1991 led to the development of a Key Planning Group of representatives of affected interests. This group assisted BLM in scoping planning issues, analyzing alternatives and developing this draft plan.

Planning issues include administrative boundaries, recreation use levels, recreation activities, recreation facilities, livestock management, cultural resource management, fish and wildlife management, coordinated management of state and other federal lands (non-BLM), and management of water resources.

Three alternatives for management of the Owyhee Wild River System have been developed and analyzed and are contained in this draft management plan/environmental assessment. The draft plan's preferred alternative establishes a comprehensive set of actions to provide the Main, West Little and North Fork Owyhee Rivers a level of resource protection, management, and public use consistent with the Wild and Scenic River Act and the Oregon State Scenic Waterways Act. Alternative B (No Action) describes and analyzes the existing management direction. Alternative C establishes a recreation focus for the river system including constructed trails, facility development and boating use limits.

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

FONSI

The environmental impacts of the preferred alternative have been addressed. On the basis of this environmental assessment, it has been determined that, after mitigation, there will be no significant impacts resulting from the implementation of the preferred alternative. Therefore, preparation of an Environmental Impact Statement pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 is not required.

Richard Conrad
Acting Jordan Resource Area Manager

WILD AND SCENIC RIVER

DRAFT MANAGEMENT PLAN/ENVIRONMENTAL ASSESSMENT

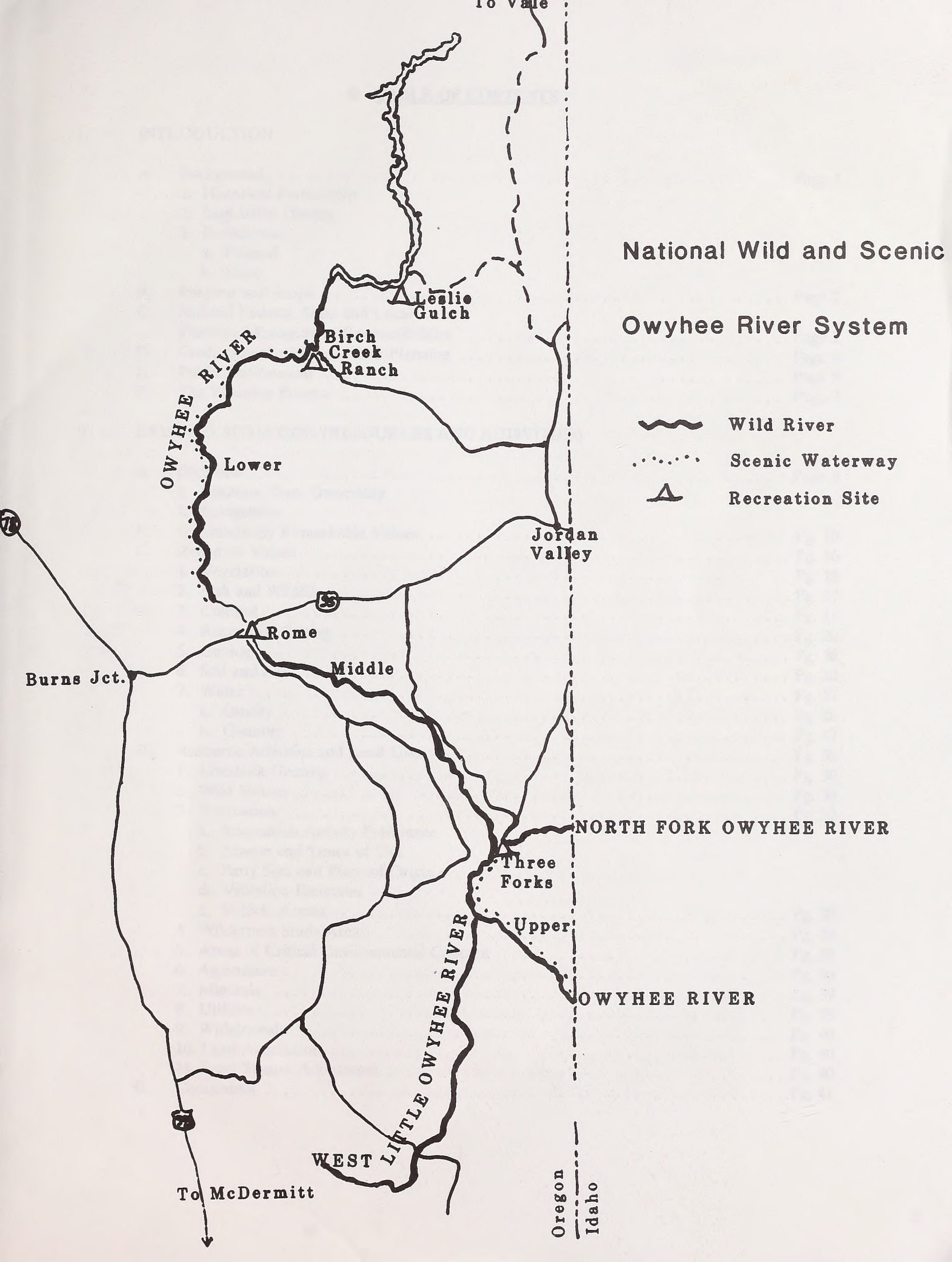
FOR THE

MAIN, WEST LITTLE AND NORTH FORK OWYHEE RIVERS

MAY 1992

PREPARED BY CATHI WILBANKS

JORDAN RESOURCE AREA
VALE DISTRICT
BUREAU OF LAND MANAGEMENT
DEPARTMENT OF THE INTERIOR


To Vale
National Wild and Scenic
Owyhee River System
Wild River
Scenic Waterway
Recreation Site
Leslie Gulch
Birch Creek Ranch
OWYHEE RIVER
Lower
Jordan Valley
95
Rome
Middle
Burns Jct.
NORTH FORK OWYHEE RIVER
Three Forks
Upper
OWYHEE RIVER
WEST LITTLE OWYHEE RIVER
To McDermitt
Oregon
Idaho

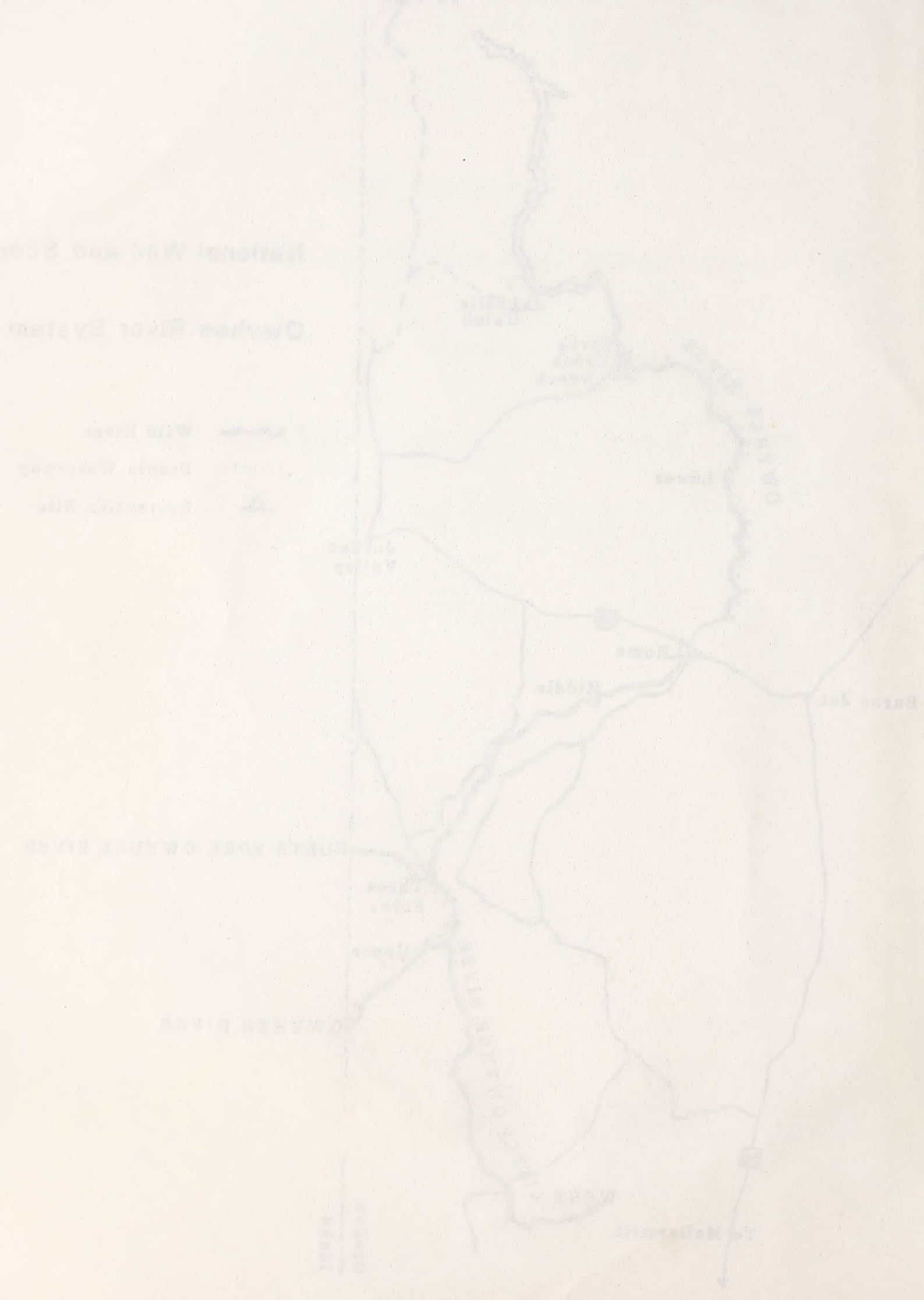


TABLE OF CONTENTS

I. INTRODUCTION

A. Background ..... Page 1
1. Historical Perspective
2. Legislative History
3. Definitions
a. Federal
b. State
B. Purpose and Scope ..... Page 2
C. Related Federal, State and Local Planning Management Responsibilities ..... Page 3
D. Conformance with Land Use Planning ..... Page 6
E. Public Involvement ..... Page 6
F. The Planning Process ..... Page 7

II. EXISTING SITUATION (RESOURCES AND ACTIVITIES)

A. Overview ..... Page 8
1. Location, Size, Ownership
2. Navigability
B. Outstandingly Remarkable Values ..... Pg. 10
C. Resource Values ..... Pg. 16
1. Vegetation ..... Pg. 16
2. Fish and Wildlife ..... Pg. 17
3. Cultural ..... Pg. 18
4. Recreation Setting ..... Pg. 20
5. Geology ..... Pg. 20
6. Soil and Air ..... Pg. 20
7. Water ..... Pg. 21
a. Quality ..... Pg. 26
b. Quantity ..... Pg. 27
D. Resource Activities and Land Uses ..... Pg. 30
1. Livestock Grazing ..... Pg. 30
2. Wild Horses ..... Pg. 30
3. Recreation ..... Pg. 32
a. Recreation Activity Preference
b. Season and Times of Use
c. Party Size and Place of Origin
d. Visitation Estimates
e. Vehicle Access ..... Pg. 38
4. Wilderness Study Areas ..... Pg. 38
5. Areas of Critical Environmental Concern ..... Pg. 39
6. Agriculture ..... Pg. 39
7. Minerals ..... Pg. 39
8. Utilities ..... Pg. 39
9. Withdrawals ..... Pg. 40
10. Land Acquisition ..... Pg. 40
11. Land Tenure Adjustment ..... Pg. 40
E. Constraints ..... Pg. 41

III. MAJOR ISSUES

A. Administrative Boundaries ..... Pg. 42
B. Recreation Use Level ..... Pg. 42
C. Recreation Management Activities ..... Pg. 42
D. Other Federal Land Management Activities ..... Pg. 45
E. Water Quantity and Quality ..... Pg. 47

IV. MANAGEMENT GOAL AND OBJECTIVES

A. Overall Goal and Objectives ..... Pg. 47
B. Objectives for each segment ..... Pg. 48

V. MANAGEMENT ACTIONS ..... Pg. 49

A. Administrative Boundaries ..... Pg. 50
B. Recreation Use Level ..... Pg. 50
C. Recreation Management Activities ..... Pg. 50
D. Other Federal Land Management Activities ..... Pg. 55
E. Water Quantity and Quality ..... Pg. 58

VI. MONITORING ..... Pg. 59

VII. IMPLEMENTATION

A. Assignments of Responsibility ..... Pg. 60
B. Scheduling and Cost Estimates ..... Pg. 61

VIII. ENVIRONMENTAL ANALYSIS

A. Introduction ..... Pg. 63
B. Affected Environment
C. Management Alternatives
D. Environmental Consequences ..... Pg. 68
E. Cumulative Impacts ..... Pg. 95
F. Mitigation
G. Irreversible and Irretrievable Commitment of Resources ..... Pg. 96

IX. APPENDICES ..... Pg. 97

A. Maps ..... Pg. 98
B. Legal Descriptions of Administrative Boundaries Pg.110
C. Laws, Regulations and other References Pg.150
D. Management Guidelines and Standards for Wild Rivers Pg.152
E. Oregon State Scenic Waterway Program Pg.154
F. Definitions Pg.158
G. Recreation Opportunity Spectrum Information Pg.160
H. Planning Participants/Consultation Coordination Pg.163

I. INTRODUCTION

A. BACKGROUND

Historical Perspective

Native Americans may have inhabited the Owyhee Uplands as early as 12,000 years ago, but recorded history of this region began in 1812 with the first explorations by white men. The name Owyhee evolved out of a scouting expedition led by Donald McKenzie in 1818. Two Hawaiian Islanders accompanying the party disappeared in the Owyhee River vicinity and by the 1830's the river had become known as the "Owyhee" (colloquial usage of the word "Hawaii").

In 1863, prospectors discovered gold along Jordan Creek, and the mining towns of DeLamar, Dewey, Ruby City, Silver City, and Baxterville were developed in the vicinity of the Owyhee River. By the 1880's, cattle and sheep ranches had become established on the plateaus and canyons of the Owyhee.

The first known recreation use of the river occurred in 1951, when commercial outfitter Prince Helfrich floated from Three Forks to Rome utilizing surplus World War II rubber rafts. Boating use on the Owyhee remained extremely light through the 1950's and 1960's. The Bureau of Land Management (BLM) began recording recreation use in 1974, when 482 persons floated the Owyhee River. No boating use has ever been recorded for the West Little Owyhee and minimal boating use (expert level kayaking) was recently recorded on the North Fork Owyhee. Refer to Map 1 for an overview of the Owyhee River system in Oregon.

Legislative History

In 1968 Congress enacted the National Wild and Scenic Rivers Act and, for the first time, established a system for preserving outstanding free-flowing rivers. The Act also established classifications for the rivers within the National Wild and Scenic Rivers System. Congress must classify each river or river segment as wild, scenic, or recreational. Each classification has specific attributes and management objectives to ensure appropriate management.

In 1984 Congress designated 120 miles of the Main Owyhee River from the Oregon-Idaho border downstream to the Owyhee Reservoir, excluding the Rome Valley from China Gulch to Crooked Creek, as a Wild and Scenic River and included it in the National Wild and Scenic Rivers System (NWSRS). The West Little Owyhee from it headwaters to its confluence with the Owyhee and the North Fork Owyhee from the Oregon-Idaho border to its confluence with the Owyhee were added to the NWSRS in 1988. All three rivers are classified as "Wild" which provides for the highest level of protection.

In 1970, the state of Oregon designated 70 miles of the Owyhee River as a State Scenic Waterway from the Oregon/Idaho border to Three Forks (25 miles) and from Crooked Creek to the mouth of Birch Creek (45 miles). Both segments are classified as Natural River Areas (refer to map 1 and Appendix A, map 5). Administrative rules have been adopted by Oregon State Parks Department to help guide the use and management of lands adjacent to the scenic waterway (see Appendix E).

Definitions

Federal and Oregon State definitions have been included in this section to provide clarification of portions of this document. For other definitions for this planning document see Appendix F.

FEDERAL

1. National Wild and Scenic Rivers Act Management: "each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area." This is interpreted by the Secretaries of Interior

and Agriculture as stating a nondegradation and enhancement policy for all designated river areas, regardless of classification.

2. **National Wild and Scenic Owyhee River System:** 186 miles of federally designated rivers and canyons in Oregon classified as wild and included in the National Wild and Scenic River System; it is 120 miles from the Idaho border on the Main Stem to the backwaters of the Owyhee Reservoir excluding 14 miles between China Gulch and Crooked Creek, 57 miles of the West Little Owyhee from near its headwaters to its confluence with the Owyhee, and the 9 miles of the North Fork Owyhee River; those Owyhee River segments and tributaries within the state of Oregon designated as Wild and Scenic Rivers. (Refer to Map 1.)

3. **Wild Rivers:** "those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America" (NWSR Act, 1968). (Refer to Appendix D for management objective and standards for wild river areas.)

4. **Birch Creek Ranch:** BLM acquired 2 developed properties along the Owyhee River near Birch Creek, Birch Creek Ranch and Pinnacles or Morrison Ranch. Both may be referred to as Birch Creek Ranch or Birch Creek Properties in this document.

STATE

1. **The Oregon Scenic Waterways Act:** A state law for river conservation administered by the State Parks and Recreation Department. The major goals of this Act are to (1) protect the free-flowing character of designated rivers for fish, wildlife, and recreation; (2) protect and enhance scenic, aesthetic, natural, recreation, scientific, and fish and wildlife qualities along scenic waterways; (3) encourage other agencies to act consistently with the goals of scenic waterways management. The Division of State Lands, the State Marine Board and the Water Resources Department also have special responsibilities associated with this Act.

2. **Natural River Areas:** those river segments in the state scenic waterway system that are generally inaccessible except by trail or boat; with related adjacent lands and shorelines that are essentially primitive, representing vestiges of primitive America. (Refer to Appendix E. OAR 736-40-040(1)(a)(C) page 179 for the land management rule associated with the Owyhee natural river area.)

B. PURPOSE AND SCOPE

This river management plan, when completed, will satisfy both Federal and State planning requirements. It will meet the requirements of the National Environmental Policy Act, the Wild and Scenic Rivers Act of 1968, as amended including the Oregon Omnibus Wild and Scenic Rivers Act of 1988, the Oregon State Scenic Waterways Act, the National Historic Preservation Act, and other laws referred to in Appendix C.

The National Wild Owyhee River System Management Plan will provide for protection and enhancement of the outstandingly remarkable and significant values of the Main Stem, West Little and North Fork Owyhee Rivers (within the state of Oregon) and that these river segments shall be preserved in free-flowing condition and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

C. RELATED FEDERAL, STATE, AND LOCAL PLANNING AND MANAGEMENT RESPONSIBILITIES

Bureau of Land Management

In 1986, The Bureau of Land Management completed Management Framework Plans (MFP) for the Southern and Northern Malheur Resource Areas. (Note: Southern Malheur is now called Jordan Resource Area and Northern Malheur is now Malheur Resource Area.) The MFPs are comprehensive land use plans for management of all BLM lands and minerals in Malheur County, Oregon. The plans established land use goals and objectives for Bureau administered lands, minerals, soils and watershed, rangeland, forest and woodlands, fish and wildlife habitats, recreation, cultural and archaeological resources. It incorporated management direction for roads and access, utility and transportation corridors, fire control, and noxious weed control. The plans include the Owyhee River system of which BLM manages 90% of the lands within the river system corridor.

Bureau of Reclamation

Originally, the Bureau of Reclamation, under the Secretary of Interior, administered the reclamation program that would provide the arid and semiarid lands of the 17 contiguous Western States a secure, year-round water supply for irrigation. The Bureau of Reclamation now provides water for farms, towns, and industries, and is responsible for the generation of hydroelectric power, river regulation and flood control, outdoor recreation opportunities, and the enhancement and protection of fish and wildlife habitats. The BR is currently developing a management plan for their Owyhee Project which includes lands within the Owyhee Wild River. Their current management emphasis is irrigation and hydroelectric power. However, BR also manages leases for recreational purposes such as Owyhee State Park and public use cabins.

Federal Energy Regulatory Commission

An independent, five member commission within the Department of Energy that retained many of the functions of the Federal Power Commission.

Bureau of Indian Affairs and Tribal Governments

The Bureau of Indian Affairs (BIA) is the Federal agency with primary responsibility for working with Indian Tribal Governments and Alaskan Native Village Communities and does so in a government to government relationship. Under a U.S. policy of Indian self-determination, the BIA is to encourage and support Tribal efforts to govern themselves and to provide needed programs and services on the reservations.

One of the principle programs of the BIA is administering and managing land held in trust by the United States for Indians. The BIA also approves trust land acquisitions, rights-of-way, leases, and permits on Tribally owned and allotted lands. The Tribes themselves now assume a much greater decision-making role in this matter than in former years.

The Land Conservation and Development Commission

Oregon's statewide planning program is directed by the Land Conservation and Development Commssion (LCDC). The commission's seven memebers are unsalaried volunteers, appointed by the governor and confirmed by the state senate. LDCD's administrative arm is the Department of Land Conservation and Development. The state has a special court to rule on matters involving planning: the Land Use Board of Appeals (LUBA).

Oregon Department of Fish and Wildlife

The Oregon Department of Fish and Wildlife (ODFW) is responsible for maintaining optimum numbers of indigenous fish and wildlife, and to ensure that no species are threatened with extinction. ODFW is also responsible for developing and administering fish and wildlife regulations. ODFW has sought to restore riparian habitat on Department lands and has actively sought and encourages other agencies and private landowners to follow their lead. ODFW monitors

the Owyhee System angling effort and harvest, as well as the hunter effort and harvest. Of significant concern to ODFW in the Owyhee area is the bighorn sheep herds.

Oregon State Land Board

The Division of State Lands (DSL) is the administrative arm of the State Land Board (composed of the Governor, Secretary of State, and State Treasurer). Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund as well as the Oregon Removal-Fill Law. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the "greatest benefit for the people of this State, consistent with the conservation of this resource under sound techniques of land management."

The State's removal-fill law protects Oregon's waterways from uncontrolled alteration. The law requires a permit for fill or removal of more than 50 cubic yards of material within the State's waterway. The permit review process involves coordination with the natural-resource and land use agencies from the local through the federal levels. Within Oregon Scenic Waterways, special authorization is needed from the Board and DSL for "any alteration of the beds and banks."

Oregon State Parks and Recreation Department

The Oregon State Parks and Recreation Department is responsible for the acquisition, improvement, maintenance and operation of Oregon's State Park system. The system is directed by the State Parks Administrator through a headquarters in Salem and five Regional Park Supervisors stationed throughout the State. In addition to operating the State Parks, the department gives technical assistance to local government agencies on park matters, develops and maintains the Statewide Comprehensive Outdoor Recreation Plan (SCORP), and administers the Federal Land and Water Conservation Fund matching grant program in Oregon. It also administers several special programs including the Oregon Beach Law, State Historic Preservation program, Oregon Recreational Trails System, State Scenic Waterways, and Willamette Greenway.

The 1988-1993 edition of the SCORP is consistent with Statewide Planning Goals and recognized the 1988 Omnibus Wild and Scenic River Act, BLM planning process and agency interrelationships.

Oregon Scenic Waterways Program

The Oregon Scenic Waterways Program is administered under the authority of the Oregon State Parks and Recreation Commission (ORS 390.805 to ORS 390.925). Administrative rules (OAR 736-40-005 to OAR 736-40-095) have been adopted to govern the program. Part of this rule, OAR 736-40-035, is included in Appendix E. This section includes general land management rules that pertain to all scenic waterways. In addition to general land management rules, specific classifications and land management rules are generated for given river segments in the system. These classifications and rules are created through the management planning process, and tailored to the actions necessary to maintain and protect identified special attributes and the existing character of the river corridor.

In addition to private land owners and county land use planning agencies, other state agencies must comply with the scenic waterway law and rules. The Parks Commission also works closely with federal agencies to assure their actions are compatible with scenic waterway law, rules, and resource management recommendations. For more information on how the general and specific land management rules are administered, see page 175 in Appendix E.

Oregon State Marine Board

The Oregon State Marine Board was established in 1959. The Board promotes safe recreational boating and regulates the use of watercraft on waterways throughout the state. All motorized watercraft and sailboats over 12' in length are required to be titled and registered with the Marine Board. Fishing and hunting guides and outfitters who operate in Oregon are also required to register with the Board.

The Board has the authority to adopt rules governing the operation of recreational watercraft including the ability to "make special regulations relating to the operation of boats, including the

establishment of designated speeds and prohibition of the use of motorboats for the protection of game and game fish at the request of the Oregon Department of Fish and Wildlife, or the carrying out of the provisions of the federal Wild and Scenic Rivers Act, Public Law 90-542, and the Oregon Scenic Waterways Act, ORS 390.805 to 390.925."

State boating laws and operating rules are enforced by county sheriffs and the State Police. The Marine Board contracts for local enforcement services and provides the necessary funding for staff, equipment, and training for marine programs in 33 counties. In addition to law enforcement, marine patrols conduct safety inspections, place and maintain uniform waterway markers and navigational aids, and provide search & rescue services.

Grants for the development and maintenance of boating related facilities are also available to state agencies, cities, counties, port authorities, and park and recreation districts from state funds appropriated to the Board. The Board also develops and distributes boating education and safety materials including printed literature, school programs, and informational kiosks at boating access sites. Funds for the Board's programs and services come from fees paid by boaters, fuel taxes, and federal grants.

State Historic Preservation Officer

The State official, appointed by the Governor in accordance with the National Historic Preservation Act (NHPA) of 1966, as amended, and designated by 36 CFR 800 to be responsible for the liaison with Federal agencies in implementing the NHPA and Executive Order 11593.

Advisory Committee on Historic Preservation

The Oregon Advisory Committee on Historic Preservation consists of members recognized professionally in the fields of history, architectural history, architecture, archaeology and/or other disciplines. One member represents the public at large and one represents Native Americans. The members are appointed by the Governor.

The Committee is charged with reviewing nominations to the National Register of Historic Places within the State and recommending approved nominations to the State Historic Preservation Office pursuant to the National Historic Preservation Act of 1966. The Committee also reviews Statewide Plans for Historic Preservation.

Oregon Water Resources Department

Oregon Water Resources Department is responsible for management and allocation of the state's water resources. The Water Resources Commission typically develops policy through the preparation of basin plans for each of Oregon's 18 river basins. Through Basin plans, the OWRD classifies stream flow for certain purposes, such as domestic use, industry, municipal, recreation, or irrigation. The plans are adopted as administrative rules which reflect how water is currently used, and its future use and allocation.

Oregon State Police

The Department of State Police was created to serve as a rural patrol and to assist local law enforcement agencies. This agency is empowered to enforce all Oregon statutes without limitation by county or other political subdivision. The Department totals 894 members strategically located at 46 stations/posts throughout the State.

The Department enforces State laws and rules. These include river management and use rules adopted by the OSMB, State Parks and Recreation Department and ODFW. State Police activities are coordinated with local and federal law enforcement agencies and assisted by the general public. For example the TIP Program (Turn in Poachers) has been established in cooperation with the ODFW and the Oregon Hunters' Association. This program is designed to involve citizens in reporting wildlife law violations. Responses from citizens throughout the State have resulted in many poaching arrests and convictions.

Oregon Department of Environmental Quality

Under a memorandum of understanding, the Oregon Department of Environmental Quality and federal agencies work together to meet implementation requirements of the Clean Water Act (P.L.92-500), as amended. The Federal Fish and Wildlife Conservation Act requires wildlife conservation be given equal consideration and be

coordinated with other features of water developments.

Oregon Department of Agriculture

The Oregon Department of Agriculture cooperates with local soil and water conservation districts to establish mutual goals in coordinating range and watershed management practices and to gather and share natural resource information that has proven beneficial for use on public and private lands. Cooperation of appropriate weed control districts also occurs as needed to deal with infestations of noxious weeds.

Malheur County Planning

The Wild and Scenic Rivers Act of 1968, the Omnibus Oregon Wild and Scenic Rivers Act of 1988, the Federal Land Policy and Management Act (FLPMA) of 1976 and the National Environmental Protection Act of 1969 (as amended) all encourage or mandate intergovernmental coordination, consultation and, where possible, plan consistency. Since the Omnibus Act envisioned a high reliance of local comprehensive plans to achieve the objectives of the Act, a review of the existing plan for Malheur County is critical.

County land use plans for private lands must conform to Statewide planning goals and objectives. Virtually all of the BLM and State-managed (private and state-owned) lands within the river planning area are designated by the county "exclusive farm use" or "exclusive range use" zones.

Through the state land use plan acknowledgment process, counties are required to: 1.) recognize the state and federal status of the designated segments of the Owyhee River System, 2.) provide for appropriate land uses and development standards for private lands adjacent to the river, 3.) develop a formal coordination process with the State Parks and Recreation Department for review of local development proposals on lands adjacent to the river.

Malheur County's 1984 Land Use Plan states that the county will cooperate with state and BLM in their efforts to protect the segments of the Owyhee River designated a scenic waterway and will initiate efforts to protect the rights of private property owners whenever they overlap. And, the county will apply the steps of the Goal 5 rule (to conserve open space and protect natural and scenic resources) when possible future designation of additional segments of the Owyhee River as a State Scenic Waterway or a National Wild and Scenic River occurs. Review of the Malheur County Land Use Plan is set for the fall of 1992 and should incorporate protective measures for these three rivers.

Malheur County Sheriff Department

The Malheur County Sheriff Department is empowered to enforce all Oregon Statutes. This generally occurs within Malheur County, however, they do have authority to cross county lines within the State. County sheriff activities are coordinated with federal and state law enforcement agencies and assisted by the general public. The sheriff department also enforces river management laws and rules adopted and implemented by the State Marine Board.

D. CONFORMANCE WITH LAND USE PLANNING

The Southern and Northern Malheur Management Framework Plans support the development of this plan as directed by the National Wild and Scenic Rivers Act and the Oregon Scenic Waterways Act. This river plan is also in conformance with the Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP), and the Malheur County Land Use Plan. This plan updates the existing BLM Owyhee Wild River Plan (1986).

E. PUBLIC INVOLVEMENT

Throughout the planning effort public involvement has been key to development of the management plan. BLM requested public input starting with preliminary boundary setting then issue scoping, management action evaluation, and draft plan and environmental assessment review. Although public involvement did not spawn enough interest for an Ad-Hoc group, a key group of affected/interested people assisted BLM by reviewing, evaluating, analyzing, and developing this document prior to full public review of this draft. Appendix H lists the members of the key group.

F. THE PLANNING PROCESS

The steps of the planning process and schedule for completion of the management plan are shown below.

Phase I - Preliminary Boundary Setting

Step	Date	Status
Initial scoping (public mail out)	July 1989	Completed
Public meetings and comment period	Aug 1989	Completed
Preliminary boundaries set	Sept 1989	Completed

Phase II - Identification of Issues and Alternatives

Step	Date	Status
Initial scoping (meetings, mail out)	April 1991	Completed
Issues identified	June 1991	Completed
Goal and objectives developed	July 1991	Completed
Range of management alternatives developed	Aug 1991	Completed

Phase III - Preparation of Draft Management Plan and E.A.

Step	Date	Status
Preferred alternatives selected	Oct 1991	Completed
Preliminary Draft Plan & Environmental Assessment	Mar 1992	Completed
Key Planning Group review of Preliminary Draft	Apr 1992	Completed
Draft plan and EA developed	May 1992	Completed
Public comments/additional data collection	Jun 1992	
Final plan and EA to public	Sep 1992	

Phase IV - Plan Implementation and Monitoring

Step	Date	Status
Plan implementation begins	Spring 1993	
Plan monitored, reviewed and updated	Ongoing	

II. EXISTING SITUATION

A. OVERVIEW

Location, Size and Ownership

Owyhee
The 120 miles of the Owyhee River included in the NWSRS are located in Malheur County in southeast Oregon. The river flows northerly from the Oregon-Idaho border to Three-Forks (26 miles), Three-Forks to China Gulch (39 miles) and Crooked Creek to the Owyhee Reservoir (55 miles). Although the 14 miles from China Gulch to Crooked Creek are not part of the NWSRS, it is included in this plan as an integral part of this planning and management effort.

The land area within one-quarter mile of the mean high water line on each side of the river totals 38,400 acres. Public ownership includes 34,807 acres (91%), 1,670 acres (4%) are owned by the State of Oregon and 1,923 acres (5%) are privately owned.

West Little
The 57.6 miles of the West Little Owyhee River included in the NWSRS are located approximately 30-55 miles south-southwest of Jordan Valley, Oregon, Malheur County and include the river from its headwaters to its confluence with the Owyhee River.

Of the land included in the 57.6 miles of designated river corridor, 12,520 acres (99.5%) are in public ownership administered by the BLM, and 54 acres (0.5%) are privately owned. These acreages are based upon interim boundaries, pending finalization through the development of this river management plan.

North Fork
The 9.6 miles of the North Fork Owyhee River included in the NWSRS are located 28 miles southeast from Jordan Valley, Oregon, Malheur County and include that segment of the river from the Oregon-Idaho border to the boundary of the NW&S Owyhee River at Three Forks.

Of the 9.6 miles of designated river, 1,247 acres (41%) are in public ownership administered by the Bureau of Land Management, 1,126 acres (37%) are State of Oregon administered lands and 620 acres (21%) are privately owned. These acreage figures are based upon interim boundaries, pending finalization through the development of this river management plan.

Navigability

State ownership to the beds of navigable waterbodies was granted to Oregon in 1859 as an incidence of statehood and is an inherent attribute of state sovereignty protected by the U. S. Constitution. Currently, both the state and federal government, and in some cases private land owners, claim ownership of the river's bed and bank. While the long term resolution of this issue is not the subject of this river plan, the future management implications are obvious. Therefore, while there may be disagreement on ownership, it is vitally important that there be agreement on the management philosophy for the Owyhee, West Little Owyhee and North Fork Owyhee Rivers.

Under state law, the Division of State Lands (DSL) is responsible for the management of the beds and banks of navigable waterbodies (ORS 274.005-274.590). DSL is the administrative arm of the State Land Board (the Board) composed of the Governor, Secretary of State, and State Treasurer. Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the greatest benefit of the people of this state, consistent with the conservation of this resource under sound techniques of land management. Also of paramount importance is the protection of the public trust values of navigation, fisheries, and public recreation.

The original federal test for determining navigability was established in The Daniel Ball case over 100 years ago. This U. S. Supreme Court case clarified that rivers "are navigable in fact when they are used, or susceptible of being used, in their ordinary condition, as highways of commerce..." Interpreting this requirement, subsequent court decisions have ruled that a waterbody is navigable if it is capable of use as a public highway for transporting goods or

for travel. The Federal court determination for navigability has not been made for the Owyhee, West Little Owyhee or North Fork Owyhee Rivers.

Within state owned waterways, any activities or land uses such as new utility or transportation corridors and boat ramps or similar facilities that impose into or cross a navigable waterway below ordinary high water will require an easement from the State Land Board. Existing facilities will require an easement at such time as they undergo major structural alternation, replacement, or relocation. In addition, removal of sand and gravel requires a royalty lease and any use that occupies any area of submerged or submersible land requires a waterway lease.

DSL has determined that there is sufficient evidence to support a claim of navigability and, therefore, state ownership of the beds and banks of the Owyhee River System as follows:

1. Owyhee River (mainstem): from the Oregon/Idaho state line (RM 186.5) to Owyhee Reservoir (RM 69).

2. West Little Owyhee: no current or historical use of the river is recorded; no study has been completed by the State for this stream reach. Further investigation is needed in order to substantiate a claim.

3. North Fork Owyhee: from the Oregon/Idaho state line (RM 9) to Three Forks (RM 0).

The position of the BLM is that navigability is a judicial finding and must be made by a Federal court. Most Oregon rivers have not been determined to be navigable or nonnavigable. The BLM considers rivers nonnavigable until proven otherwise. However, a trial may not be required if the evidence is persuasive and all partners agree. Nonetheless, the final position of the BLM must be based on consultation with appropriate legal counsel (Department of Justice) and the proper filing of court stipulations. For those rivers found nonnavigable, the BLM manages the bed and banks for the people of the United States.

As with any jointly managed resource, jurisdiction is not as important as care for the resource. The BLM and DSL will continue to work together to assure that the public trust interest and the purpose of the Wild and Scenic River's Act are met.

B. OUTSTANDINGLY REMARKABLE VALUES

When Congress designated these three rivers as National Wild and Scenic Rivers, they formally recognized several unique river values. These Outstandingly Remarkable Values (ORVs) are: recreational, cultural, geologic, wildlife, and scenic for the Owyhee; recreational, scenic, and cultural for the West Little Owyhee; and, recreational, scenic, geologic, and wildlife for the North Fork Owyhee. Through the resource assessment process, wildlife was determined to be an ORV for the West Little Owyhee River. However, the congressioanl record for cultural as an ORV for West Little Owyhee and geologic as an ORV for North Fork Owyhee could not be confirmed.

Outstandingly remarkable values are what the managing agencies are mandated to "protect and enhance." Therefore, these and any other river values determined to be outstanding become the standards which river management actions would be judged.

The SCORP regions were used in determining ORVs on a regional basis. The SCORP region for the Owyhee system includes Malheur, Harney and Lake Counties. The criteria for an outstandingly remarkable rating was developed and agreed upon by the Statewide Wild and Scenic Rivers Policy Group. The Group is comprised of representatives from BLM, USFS, various state agencies and local governments, as well as private industry, landowners, and the environmental community. The following is an assessment of each river's ORVs.

Recreational

Criteria for Outstandingly Remarkable Rating.

Recreational opportunities are, or have the potential to be, unique enough to attract visitors from outside of the geographic region. Visitors would be willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, photography, hiking, fishing, hunting, and boating.

Interpretive opportunities may be exceptional and have the potential to attract visitors from outside the geographic region. The river may provide or have the potential to provide settings for national or regional usage or competitive events.

Evaluation of the Present Situation

Owyhee

Outstanding recreational opportunities are available in the canyon, including rafting, drift boating, kayaking, hiking, photography, nature study, fishing, hunting, camping, and rockhounding. The Owyhee is recognized throughout the country as a prime early-season white water river and is becoming increasingly popular with both commercial and non-commercial river runners.

Exploring the canyon on foot provides opportunities for photography, nature study, and rockhounding. Use is restricted by limited access and the steep and rough terrain. However, the canyon has become increasingly popular as word spreads of its scenic beauty and unspoiled character.

The sports fishery includes remnant populations of rainbow trout and excellent populations of smallmouth bass and catfish. Mule deer, California bighorn sheep, antelope, chukar, partridge, quail, and sage grouse afford great opportunities for hunting, study and photography.

Conclusion

The recreation opportunities of the Owyhee River Canyon are of outstandingly remarkable value.

West Little

This river segment offers a wide variety of recreational opportunities. Very high quality off-trail backpacking opportunities along a number of possible routes and with a range of physical challenge have been identified. The West Little Owyhee River has been identified as the major attraction for day hikers visiting the Upper West Little Owyhee and Owyhee Canyon Wilderness Study Areas.

Unique to the area is the opportunity to travel by swimming and hiking. Late summer pools bounded by high basalt cliffs must be crossed by those who

wish to travel the length of the canyon. These pools may be challenging and exciting obstacles due to the abrupt turns of the canyon which make length of the pools uncertain.

Excellent wildlife viewing and hunting is available in this area due to the richness of the area's fauna. Photographers find challenging subjects in the wildlife and landscape.

Conclusion

Because of the variety and quality of recreation available within this river canyon, especially the outstanding opportunity for primitive type recreation experiences, the West Little Owyhee River and its corridor provide outstandingly remarkable recreational resource values. This finding confirms the Congressional Record.

North Fork

The North Fork Owyhee offers very high quality backpacking opportunities. Excellent opportunities for early season (spring runoff) expert level kayaking on the 12 mile section between North Fork Crossing and Three Forks are also available. Other rivers with equivalent challenges have drawn kayakers from far beyond their local region.

Numerous other recreational opportunities, including hunting, camping, wildlife viewing and photography are also available in the area.

Conclusion

Kayaking and hiking opportunities available within the North Fork Owyhee River corridor are determined to be of outstandingly remarkable value. This finding confirms the Congressional Record relating to the recreational value of the North Fork Owyhee River.

Scenic

Criteria for Outstandingly Remarkable Rating

The landscape elements of land form, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions within the geographic region. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment length and not common to other rivers in the geographic region.

Evaluation of the Present Situation

Owyhee

The canyons of the Owyhee River are dramatic, awe-inspiring landforms. The reddish-brown canyon walls, sharply contrasted by the colorfully eroded chalky cliffs reach up to 1,000 feet above the pristine sagebrush and grass covered and talus slopes that form the river's edge. In places the cliff drops hundreds of feet directly into the river. The canyon rims are often eroded into a multitude of towering spires, while in other areas the canyon walls reach to the sky as fractured, blocky monoliths tinted with brilliant green, yellow and orange microflora.

Numerous side canyons offer an element of mystery as they twist out of sight, and erosional features such as honeycombed cliffs and perched rock formations add intriguing textures and colors to the vertical landscape.

This drop and pool type river offers thrilling whitewater or slow-moving, serene pools providing the boater with an excellent opportunity to view an ever-changing scene of water and land forms.

Conclusion

The combination and contrasts of land, vegetation and water justifies the scenic value of the Owyhee to be deemed outstandingly remarkable.

West Little

The designated river corridor is characterized by the stark contrast between the inner canyon and the typically flat sagebrush plateau through which it runs. The river itself offers many cool, clear, secluded pools that are confined by sheer rock walls whose colorful, abstract beauty is the product of eons of erosion and weathering. Between those pools are reaches that flow as riffles or rapids during periods of high water, but which become sandy or gravelly dry reaches in the drier summer

months. The vegetation within the corridor is virtually pristine in all but the upper reaches due to the rugged canyon walls that limit human and livestock use. The solitude and lack of apparent human influence enhance the stark beauty of the canyon. Views from the canyon rim command a feeling of awe and wonder, as the river and its past are revealed in the rock strata that have been laid there by ancient volcanic activity.

Conclusion

The West Little Owyhee offers a unique landscape that contains those visual qualities that result in outstandingly remarkable scenic values. This finding confirms the Congressional Record relating to the scenic values of the West Little Owyhee River.

North Fork

The designated river corridor contains a subtle diversity of land forms and vegetation. Interesting erosional patterns and colorful rock strata mix with large stands of juniper. Canyon bottoms are overshadowed by the steep, rugged canyon walls. Two main side canyons laced with juniper trees add to the complexity of the landscape. In the typically flat high sagebrush desert these canyons provide an exceptional visual setting. The remoteness and solitude found there contributes to this scenic setting.

Conclusion

The North Fork Owyhee River offers a unique landscape holding landforms, vegetation, and water that possess visual qualities resulting in outstandingly remarkable scenic values. This finding confirms the Congressional Record relating to the scenic values of the North Fork Owyhee River.

Geologic

Criteria for Outstandingly Remarkable Rating

The river or the area within the river corridor contains an example(s) of a geologic feature, process or phenomena that is rare, unusual, one-of-a-kind, or unique to the geographic region. The feature(s) may be in an unusually active state of development, represent a "textbook" example and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, and other geologic structures).

Evaluation of the Present Situation

Owyhee

Rocks exposed along and adjacent to the Owyhee River range in age from late Miocene to Recent. From oldest to youngest, these groups consist of rhyolitic flows, basalt flows, sedimentary rocks, young lavas, and alluvial deposits.

Benchlands were formed during a period of intensive volcanic activity. Lava flows filled the stream valleys, including the Snake River, damming them and impounding large lakes. Several thousand feet of sediments were deposited in the lakes which subsequently were drained by streams eroding through basalt dams.

The geologic features are influenced by faulting and warping. A portion of the river valley is structurally controlled by a fault which has down-dropped the east side of the canyon relative to the west side.

The colors within the canyon vary from mainly buff or reddish-colored rhyolite and darker basalt to the area called Chalk Basin typified by alternate very dark and chalk-colored deposits.

Conclusion

The geologic resources of the Owyhee River Canyon are outstandingly remarkable. These unique geologic features add significantly to the scenic quality of the area.

North Fork

Geologic formations of this canyon are predominantly of volcanic origin. The canyon exposes 500 vertical feet of welded tuffs and tuffaceous sediments partly capped with thin basalt flows. These strata rest upon Miocene basalts and andesites which were subsequently uplifted as the river cut its canyon.

The ongoing geologic forces of weathering and erosion are apparent. The rock spires and walls have been carved into an array of sculpted shapes

by motion of wind and water borne soil and rock. These shapes demonstrate the forces that have created the canyon as well as providing the visual qualities that characterize it.

Conclusion

The geologic features of the North Fork Owyhee are not unique to the region. More extensive examples are found within the Main Owyhee. Professional judgement is that the geology of the North Fork, when considered alone, may only be a significant resource value. It should be noted that when the North Fork is considered as an integral part of the complete river system its status as a significant of the overall geologic picture may contribute to addtional resource value. Thus the North Fork's geologic resource value may more closely fit the congressional record and its listing as an oustandingly remarkable value.

Prehistoric, Cultural

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by native Americans, sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest values(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes. Of particular value will be pristine sites that have not been disturbed.

Evaluation of the Present Situation

Owyhee

The Owyhee and its margins would have been the major source of permanent water, fuel, varied animal and vegetable foods, and protected campsites in the harsh environment of arid southeast Oregon. Approximately 100 prehistoric cultural resource sites have been recorded on the lower segment of the Owyhee River between the Rome Launch Site and Birch Creek Ranch. Half of these sites are considered significant by the archeologist who recorded them.

The lower Owyhee contains outstandingly remarkable sites with research and public education values. "The Hole-in-the-Ground" Petroglyph Site is probably the outstanding site of its kind in eastern Oregon, and can be investigated by archaeologists and enjoyed by river runners.

Although no inventories have been conducted within the corridor upstream from Rome to the Idaho border, a significant site was found and excavated along a tributary of the Owyhee. Archeological resources found within this rock shelter have been carbon dated to 9,500 before present. The staff archeologist's professional judgement is that outstandingly remarkable archeological properties are present along the upper reaches of the Owyhee River, and that the sites are probably in better condition than those along the lower segment.

Conclusion

Significant archeological sites have been identified with the Owyhee River corridor. Therefore, the prehistoric cultural resource is an outstandingly remarkable value of the Owyhee River.

West Little

No prehistoric cultural resource inventory has been completed for the West Little Owyhee River corridor. A cultural overview is by definition not possible because no literature on the local resource has been produced. There are indications that the area was utilized. Some intensively used prehistoric campsites, including numerous caves and shelters along the canyon, have been located in the area. Two petroglyph sites have been located, one of which was associated with hunting blinds. Regional or national significance for these sites in particular and the area in general has yet to be determined. Field work to identify sites has not been scheduled. Interest by non-BLM researchers has not been expressed. In the interim, known and discovered sites are protected under existing statutes, regulations and policy.

Conclusion

Although no cultural resource inventory has been completed for the West Little

Owyhee River, the professional judgment of the staff archeologist is that based on similarities in topography and known site preferences of Native Americans, this canyon has a high potential for prehistoric cultural values. Furthermore, due to the extreme remoteness and lack of development and access to the area, any existing sites may have a higher probability of being undisturbed and therefore be more valuable for scientific research. Because of this lack of knowledge, no determination is made pending further assessment. Further work is necessary to confirm the Congressional Record.

Historic, Cultural

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual or one-of-a-kind in the region. A historic site(s) and/or feature(s) in most cases is 50 years old or older. Of particular significance are sites or features listed in, or are eligible for inclusion in, the National Register of Historic Places.

Evaluation of the Present Situation

Owyhee

Historic sites that contributed to the Euro-American settlement and development of southeast Oregon and southwest Idaho are present within the Owyhee River area. Wagon and military roads dating back to the 1860's criss-cross the Owyhee and provide insight into the settlement and development of this area.

Birch Creek Ranch, an historic ranch managed by the BLM, has been recorded by an historian, and is considered potentially eligible to the National Register of Historic Places. It is described as an historic landscape, and represents historic ethnic values of early Basque settlement of the area.

Abandoned ranches and homesteads, represented by the remains of cabins, old road grades, stone corrals, irrigation ditches, exotic trees and other plantings, stone fences, collapsed dams, cleared fields, and the rusted remains of farm equipment are visible along the river. They attest to early, often unsuccessful, efforts to settle, farm, and ranch the fertile river benches.

Conclusion

Although only one site along the Owyhee has been recorded and determined to be potentially eligible for the National Register of Historic Places, other sites appear to meet one or more of the criteria for eligibility, and thus add to the outstandingly remarkable determination. The Owyhee River plays a major role in the cultural history of the area. The historic cultural resources of this river are outstandingly remarkable.

Wildlife

Criteria for Outstandingly Remarkable Rating

Wildlife values may be judged on the relative merits of either wildlife populations or habitat - or a combination of these conditions.

Populations. The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species.

Habitat. The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federally listed or candidate threatened and endangered species. Contiguous habitat conditions are such that the biological needs of the species are met.

Evaluation of the Present Situation

Owyhee

The Owyhee River Canyon and adjacent sagebrush desert lands on the rims provide diverse habitat for over 200 species of wildlife. Birds are especially

abundant, both in species richness and number of individuals. The 120 miles of canyon walls provide excellent habitat for nesting raptors. The Owyhee and its associated canyons rival the Birds of Prey area, near Boise, Idaho, in raptor variety and abundance. Swainson's, ferruginous, red-tailed, kestrel, and northern harrier hawks are common. Prairie falcon and sharp-shinned hawks have frequently been observed. Golden eagles are abundant year-long while bald eagles, attracted by abundant waterfowl, frequent the canyons during the winter.

Upland "game birds" include excellent populations of chukar partridge and California quail. Scattered groups of Hungarian partridge may be observed. Mourning dove make extensive use of the area during the breeding season. Sage grouse are especially common on adjacent benchlands in mixed sagebrush habitats.

Wintering waterfowl utilize the unfrozen pools between rapids. Canada geese are especially abundant during severe winters. Census by BLM and Oregon Department of Fish & Wildlife have often tallied over 3,000 geese plus nearly as many mallard, redhead, teal, scaup, merganser, and grebe. Several of these waterfowl species are attracted to the Owyhee and tributaries by the abundance of fish, especially non-game species such as shiners and dace.

Riparian vegetation within the canyon attracts a host of song birds. Many are uncommon to the surrounding expanses of arid desert, making the Owyhee Canyon truly an "oasis."

The California bighorn sheep, reintroduced into several areas within the river canyon in the 1960's and 1980's, maintains viable populations. The California bighorn sheep is a federal Category II species. During the early 1970's the California bighorn was listed as rare on Oregon's state list, but currently has no state designation. The estimated 1991 state (primarily southeast Oregon) population was 1,900 animals.

Other species include mule deer and pronghorn antelope which use the associated benchlands adjacent to the canyon. Mountain lion (cougar) have become more common during recent years. Other mammals of these varied habitats include bobcat, coyote, badger, beaver, otter, muskrat, marmot, raccoon, porcupine, and jack and cottontail rabbit.

Conclusion

The quality and quantity of wildlife within the Owyhee canyon affords this resource to be deemed outstandingly remarkable.

West Little

Values noted for the Owyhee River Canyon are also present for the West Little Owyhee River and its spectacular canyon. The West Little Owyhee is noted for its abundance and variety of birds. Much of this pristine canyon is used as nesting habitat by a wide variety of raptors including several hawk species and golden eagles. The canyon holds habitat that would seem to be favorable for peregrine falcons, but only unconfirmed sightings have been reported from the area. The rather uncommon prairie falcon inhabit the area in significant numbers. Chukar partridge frequent the rimrocks and talus slopes. Numerous species of nongame birds take advantage of the excellent habitat diversity of this canyon. The plateau surrounding the canyon is home to a notably large concentration of sage grouse; the largest in Malheur County. The sage grouse is a candidate species (Category II) for Federal listing as Threatened or Endangered in Oregon under the Endangered Species Act. The state of Oregon has sage grouse classified as sensitive and categorized as vulnerable.

A variety of mammals inhabit the river area. Notable among these is a herd of restocked California desert bighorn sheep. Toppin Creek Canyon in particular provides excellent habitat for bighorns. In 1989 two trophy rams were taken from this special hunt area. Pronghorn antelope, mule deer and various small game, fur-bearers, and rodents are common. White-tailed jackrabbits are common. The abundance of small mammals on the plateau contributes to the success of the extensive raptor population. Various bats inhabit the crevices of the canyon rocks.

Conclusion

The quality and importance of habitat and resulting wildlife species diversity, particularly for raptors and bighorn sheep, qualifies this resource to be considered an outstandingly remarkable value of the West

Little Owyhee River. This outstandingly remarkable value was not recognized in the Congressional Record.

North Fork

A community of western juniper provides hiding and thermal cover for wildlife. Mule deer, especially, make use of the North Fork Canyon as a migrational corridor to wintering ranges farther down the main Owyhee Canyon. Other species include cougar, pronghorn antelope, white tailed jackrabbit, and rodents. The abundance of small mammals on the plateau contributes to the large and diverse raptor population of the canyon.

Numerous species of birds utilize the juniper trees and juniper berries throughout the year. Sage grouse, a candidate for federal listing as Threatened or Endangered, are quite common. Numerous species of nongame birds take advantage of the diverse habitat.

Conclusion

Due to the variety and quality of wildlife and wildlife habitat within this area, wildlife values on the North fork of the Owyhee are outstandingly remarkable. When considered as part of the complex of habitats that interact through the entire river system of the Owyhee (especially the migration routes), these values may be found to be greater or more significant. This finding is consistent with the Congressional Record.

C. RESOURCES

Vegetation

The National Wild and Scenic Owyhee River System lies within the broader landform/vegetation classification known as the Intermountain Sagebrush Province/Sagebrush steppe Ecosystem (Bailey-Kuchler, 1966).

Owyhee

Vegetation within the canyon is limited by the periodic high volume flow of water, especially during early spring thaw. As a result of this scouring, flexible herbaceous plants predominate.

The riparian areas of the canyons are generally very narrow and comprised mostly of grasses, rushes, and sedges. In isolated areas of the main canyons are species of juniper, willow, and hackberry.

Adjacent uplands are within the cold desert steppe province. Various species of sagebrush and associated bunchgrasses predominate. Most common is the Wyoming big sagebrush Artemisia tridentata wyomingensis - bluebunch wheatgrass Agropyron spicatum community. Pure stands of Idaho fescue and bluebunch wheatgrass often occupy the canyons' steep slopes, with Idaho fescue being more abundant in sheltered, more moist habitats.

Occasional volcanic ash deposits, such as those at Chalk Basin near the confluence of Bogus Creek, afford unique habitats where endemic plant species have evolved. Several of these plants are being studied (Category II status) for possible listing as Federally Threatened or Endangered status.

Eight plant species known to be located in the Owyhee Canyonlands are classified as sensitive, Federal Category II, or "Watch List". These species are:

1. Weak milk-vetch (Astragalus solitarius) -- On Oregon's Sensitive List and a Federal Category II species (more information is necessary prior to final classification).

2. Sterile milk-vetch (Astragalus sterilis) -- On Oregon's Sensitive List and a Federal Category II species.

3. Owyhee River Stickseed (Hackelia ophiobia) -- On Oregon and BLM "Watch List."

4. Anderson's Buttercup (Ranunculus andersonii) -- On Oregon and BLM "Watch List"; little known of it's local distribution.

5. Packard's sagebrush (Artemisia packardiae) -- A BLM sensitive species due to limited distribution.

6. Cusick's Chaenactis (Chaenactis cusickii) -- A BLM sensitive species.

7. Idaho Cryptantha (Cryptantha propria) -- A BLM sensitive species.

8. Naked-stemmed Phacelia (Phacelia gymnoclada) -- A BLM sensitive species.

West Little

Extremely narrow canyons provide shading from desert sun. The West Little Owyhee canyon is exceptional in this respect due to nearly 60 miles of very narrow and deep canyon. Several species of plants are endemic to the mesic shaded canyon walls. An example is Packard's sagebrush, Artemisia packardii.

The high volume scouring of flood waters when constricted to the narrow canyon floor precludes the development of extensive riparian vegetation.

Associated uplands are often dominated by low sagebrush, Artemisia arbuscula, an important habitat for wildlife.

Professional judgement is that the canyon floor and walls hold vegetation that is virtually pristine. The isolated pockets of vegetation found there have been free from human impact, and thus may be examples of relict plant communities. Although no inventories have been performed, it is the botanist's judgement that the eight sensitive-type species listed above may also be found within the West Little Owyhee River canyon.

The presence of plant species or relict plant communities that require special management has not been documented. Professional judgement that such species or communities may exist in this area warrants management that assumes their presence until systematic observations are made.

North Fork

Extensive stands of western juniper, Juniperus occidentalis, typify the North Fork of the Owyhee. Juniper is not common along the Owyhee River. The North Fork and one stand along the main Owyhee are the only significant juniper stands within Oregon's portion of the river system. Junipers provide tree-form structure which is valuable for habitat. Mule deer utilize juniper for thermal cover in both winter and summer. Several bird species are dependent upon juniper berries for winter forage, notably the Townsend's solitaire and robin.

Fish

Owyhee

Prior to development of the Owyhee Dam, salmon migrated from the Pacific Ocean upstream through the Columbia-Snake Systems into the Owyhee River. The construction of the Owyhee Dam and other dams downstream on the Snake River blocked these migrations. Hatchery coho salmon were stocked in Owyhee Reservoir, but the stocking effort was not successful.

Squawfish, chiselmouth, shiners, dace, and bridgelip and coarsescale suckers are native to the river. The native redband trout may also exist. The redband trout is a Category II candidate for protection under the Endangered Species Act. Work is underway to determine if pure strain redbands still exist in this river. The ODFW has successfully introduced channel catfish, smallmouth bass and other spiny ray fish. Efforts to introduce rainbow trout have been only marginally successful.

If the presence of the Category II Redband trout is confirmed, the fisheries resource of the Owyhee may be outstandingly remarkable. The potential for fisheries to be considered an outstandingly remarkable value is very evident.

West Little
A 1979 BLM stream survey reported speckled dace, redside shiners, and bridgelip suckers as common. The river contains remanent populations of stocked trout and smallmouth bass are found near the mouth of the river. Redband trout also inhabit the West Little Owyhee, but the redband gene pool may have been diluted by past hatchery-rainbow stocking. Hatchery stocking has ceased in the Owyhee River System. The redband trout is a Category II candidate for protection under the Endangered Species Act. Work is underway to determine if pure strain redbands still exist in this river. Whatever the outcome of this study, the resident trout in this river are reproducing naturally in the wild and thus are considered to be wild stocks.

If the presence of wild stocks of a species of fish that is a Category II candidate for protection under the Endangered Species Act is confirmed, the fisheries resource of the West Little Owyhee may be outstandingly remarkable. Field work to document that presence is scheduled.

North Fork
Surveys performed by the Oregon Department of Fish and Wildlife from 1964-1966 reported nine species of fish: speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpins, northern squawfish, largescale sucker, and hybrid rainbow/redband trout. More recent observers have noted the presence of smallmouth bass.

The redband trout is a Category II candidate for protection under the Endangered Species Act. The redband gene pool has been diluted by past hatchery-rainbow stocking, but such stocking has ceased in the Owyhee River System. The resident fish in this river are reproducing naturally and thus are considered wild stocks, but pure strains are probably not present. However, with improvements in habitat conditions and subsequent increases in fish populations and size, the North Fork may have the potential for outstandingly remarkable fisheries values.

Wildlife

Owyhee
The wildlife resource of the Owyhee River is an outstandingly remarkable value. Refer to the previous section on outstandingly remarkable values for a description of the wildlife resource.

West Little
Values noted for the Owyhee River Canyon are also present for the West Little Owyhee River and its spectacular canyon. Raptor habitat is especially favorable and raptor abundance is truly outstanding. Waterfowl are less abundant due to the narrow canyon and seasonal lack of water. However fish-eating birds such as merganser and cormorant, take advantage of abundant fish when low water occurs during the summer and autumn. (Reference the ORV section.)

North Fork
The wildlife resource of the North Fork Canyon is an outstandingly remarkable value for this wild and scenic river. The canyon provides upland and riparian habitat for a significant number and diversity of wildlife species. Deep canyon habitats such as the Owyhee System are considered significant to wildlife in desert and semi-desert environments, particularly when the area supports a large diversity of vegetation including thermal cover. Wildlife species including mule deer, pronghorn antelope, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, bats, and a large population of raptors. (Reference the ORV section.)

Cultural - Prehistoric

Owyhee
Only the lower segment of the Owyhee River between the Rome Launch Site and Birch Creek has been inventoried for prehistoric cultural resources, and that inventory was conducted in 1976. Approximately 100 sites were recorded, and it is likely that a similar number of unrecorded sites are present in the river corridor. Eventhough about half of the 100 recorded sites were considered significant, no determination of eligibility to the National Register of Historic Places has been undertaken. Types of sites include campsites,

petroglyph sites, lithic scatters, rock shelters, quarries, and "Early sites." Stratified campsites, petroglyph sites, rock shelters, and Early man sites are particularly important to the prehistory of the region, and some of these are likely to have national significance. A complete description of the Owyhee's outstandingly remarkable prehistoric cultural resource can be found in the previous section.

West Little
Although no cultural resource inventory has been completed for the West Little Owyhee River, the professional judgment of the staff archeologist is that based on similarities in topography and known site preferences of Native Americans, this canyon has a high potential for prehistoric cultural values. For more details, refer to the previous section on outstandingly remarkable values of the river corridors.

North Fork
No cultural resource inventory has been completed for the North Fork Owyhee River corridor. Prehistoric artifacts have been identified within the river corridor; evidence that the area was utilized. Its regional or national significance has yet to be determined. In the interim, known and discovered sites are protected under existing statutes, regulations and policy.

Although no cultural resource inventory has been completed for the North Fork Owyhee River, professional judgment is that based on similarities in topography and known site preferences of Native Americans, this canyon has a high potential for prehistoric cultural values. Furthermore, due to the extreme remoteness, lack of development and access to the area, any existing sites may have a higher probability of being undisturbed and therefore more valuable for scientific research. Due to the lack of documentation, no determination of significance or ORV is made pending further assessment.

Cultural - Historic

Owyhee
The Owyhee River was a significant contributor to the Euro-American settlement and development of the area. Wagon and military roads through the area include the Fort McDermitt to Jordan Valley Road, the Oregon Central Military Road, and the Chico, California to Silver City, Idaho Road, all of which used the Owyhee Crossing in the vicinity of Rome; and the Ft. McDermitt to Silver City Road that crossed the Owyhee at Three Forks. Traces of these road grades can be seen on the hills and canyon walls adjacent to the crossings. Most roads date to the Civil War, or shortly thereafter, and relate to the southwest Idaho gold fields, or to military actions against Native Americans.

The remains of homestead and ranching operations, military roads and stage lines are found throughout the river canyon. Nothing of substance is known about the historic sites along the upper reaches of the river. Above Three Forks, the Owyhee River becomes steeper, wilder, and more remote. USGS topographic maps show several abandoned structures that may have been built by hunters, trappers and/or prospectors. In the interim, known and discovered sites are protected under existing statutes, regulations and policy.

West Little
The West Little Owyhee has not been systematically inventoried to determine the existence of historic cultural resources. The majority of the land in this area was surveyed by the General Land Office in 1881, with the remainder surveyed in 1904 and 1918. The survey noted a wagon road, a corral, houses, and rock foundations.

Since the main Owyhee River contributed significantly to the settlement and development of the area, it is very likely that the West Little Owyhee area also contains historic insight to the settlement of this region. Professional judgement is that few sites are located in this area, but due to the extreme remoteness and inaccessibility of the area, any existing sites may be undisturbed and therefore of greater value to science.

North Fork
The North Fork Owyhee has not been systematically inventoried to determine the existence of historic cultural resources. The Three Forks area provides some insight to the area's cultural history with the Ft. McDermitt to Silver City Road crossing, an old log cabin, and remnants of a mid-19th century army fort. At least one military wagon road, several civilian pioneer wagon roads, and remains of cabins,

a still, and rock fences are also located in the North Fork area.

Professional judgement is that few sites are located in this area, but due to the extreme remoteness and inaccessibility of the area, any existing sites may be undisturbed and therefore of greater value to science.

Recreation Setting

The three segments of the Wild and Scenic Owyhee River system provide a primitive type recreation setting. Most of the canyon areas are pristine and remote with few vehicle access points. Types of recreation available include whitewater rafting, viewing scenery and wildlife, hunting, fishing, camping, day hiking, rockhounding, and nature study. Several sites on the Owyhee and at least one site on each of the West Little and North Fork segments provide vehicle touring destinations. Undeveloped camp sites are numerous while developed camp sites are few. There has been an increased interest in backpacking, particularly in the major tributary canyons such as the North Fork and West Little. This outstandingly remarkable resource is described in the previous section for each river.

Geology

Owyhee
The Owyhee River cuts a canyon 500 to 1,100 feet deep into the high plateau of the Owyhee Uplands that cover southeast Oregon. The plateau is of volcanic origin and averages 5,000 feet in elevation. It is flat to gently rolling, with the greatest topographic variations occurring north of the Owyhee River. The river has cut the basaltic and rhyolitic rocks of the plateau into tightly meandering, U-shaped canyons, with alternating vertical walls and steep talus slopes. Refer to the description of the outstandingly remarkable geologic resource of the Owyhee River in the previous section.

West Little
The West Little Owyhee River originates in a broad, hilly upland characterized by tuffaceous sedimentary rocks believed to be the result of lake or flood plain deposits. The river then descends through a steeply-walled canyon whose width varies from one to two thousand feet to as little as eight feet. The walls expose 500 vertical feet of welded tuffs and tuffaceous sediments partly capped with thin basalt subsequently uplifted as the river cut its canyon. Thus, a journey down the canyon leads from the most recent to the oldest strata and the region's volcanic history can be observed. Modern geologic forces of weathering and erosion are apparent, and the wind and water carved rocks that contribute so much to the area's beauty also serve to demonstrate the forces that have created the canyon.

The geologic features of the West Little Owyhee are not unique to the region, but are unique to Oregon. They serve to demonstrate the geologic history of the Owyhee Basin better than other sub-drainages in the watershed. When considered in the context of the entire watershed, the geologic resource of this river is an integral part of the whole and is considered a significant resource value within the geographic region.

North Fork
Geologic formations of the North Fork Owyhee River are predominantly of volcanic origin. At the point where it enters Oregon, the river flows about two miles through a steeply-walled canyon some 500 feet deep. Middle reaches of the river flow through a more open canyon that gradually opens to over 1 1/2 miles in width and 1200 feet in depth. The lower two miles of the canyon feature a sinuous, tightly constricted bottom, some 200-400 feet deep. Refer to the description of this river canyon as a potentially outstandingly remarkable geologic resource in the previous section.

Soil

The most recent and comprehensive soils information for the three wild and scenic river corridors is a 1969 Level IV soil survey report by the Oregon State Water Resources Board. This survey maps twelve "classification units" in five groups within the river corridors. Those units are:

LEVEL TO SLOPING SOILS OF OLDER FANS AND TERRACES

1. Classification Unit 56: clayey, shallow, with hardpan.

UPLAND SOILS OVER SOFT SEDIMENTS

2. Classification Unit 60: Loamy and moderately deep.

DARKER SOILS OF HIGHER ELEVATIONS

3. Classification Unit 82: Loamy and moderately deep.
4. Classification Unit 83: Loamy-clayey, very stony, shallow.
5. Classification Unit 84: Loamy, rocky, very shallow.

LIGHT COLORED SOILS OVER HARD BEDROCK

6. Classification Unit 76: Clayey, very stony, shallow
7. Classification Unit S76: Clayey, extremely stony, shallow.
8. Classification Unit 76L: Clayey, somewhat stony, shallow
9. Classification Unit 77: Loamy, rocky, very shallow.

MISCELLANEOUS LAND UNITS

10. Classification Unit 96: Steep rock land.
11. Classification Unit 98: Soft, raw sediments, steep.
12. Classification Unit 99: Bare lava flows.

The predominant soils of the three rivers are as follows:

Owyhee
Soils of the Owyhee River are predominantly in specific slope groups of units 76 and 96. Unit 76 soils are shallow, clayey, very stony, well drained over basalt, rhyolite, or welded tuff, occurring on gently undulating to rolling lava plateaus and some very steep faulted and dissected terrain. This predominant soil type contains about 30 percent rock land, and has 20 to 60 percent and steeper slopes. Unit 96 soils are shallow, very stony soils interspersed with rock outcroppings over rough, steeply sloping areas. This predominant soil type is predominantly rock land with 20 to 60-plus percent slopes.

West Little
Soils of the West Little Owyhee River predominantly fall within unit 77. Unit 77 soils are shallow, very stony or rocky, well drained soils on undulating or rolling plateaus underlain by basalt, rhyolite, or welded tuff. This unit 77 soil type contains about 30 percent steep rock land with 12 to 20 percent slopes. The steep rock land occurs as canyons and fault scarps.

North Fork
Soils of the North Fork Owyhee River fall within the same slope group and unit 76 classification as the Owyhee River, described above.

Air

Air quality within the three river corridors is considered to be very high. Except for intermittent local disturbances such as wildfires, dust-raising activities or traffic, few sources of potential pollutants are present in the area. Some pollutants from more urbanized or agricultural areas to the north may affect the area from time to time, but their influence, if present at all, is considered negligible. Significant responsibility is placed on the federal land manager for protection of air quality and related values including visibility.

Water Resource

The Owyhee River Basin comprises portions of northern Nevada, southwestern Idaho, and southeastern Oregon. The Owyhee basin drains approximately 11,337 square miles from its headwaters in Nevada to its confluence with the Snake River at river mile 392.2 south of Ontario, Oregon. The mainstem of the Owyhee River within Oregon is enjoined by its major tributaries the North and Middle Forks, the West Little Owyhee River, and Antelope, Soldier, Jordan, and Crooked Creeks.

The drainage system is characterized by steep river valley sideslopes, a series of perennial to intermittent tributary systems, and narrow steeply incised side canyons which empty directly into the main channel.

Surface runoff in this perennially flowing river is mostly from winter snowpack accumulations in the high mountainous areas. The average annual precipitation along the mainstem in Oregon is about 8 inches, while the range over the entire basin is approximately 7 to 33 inches annually. Snowpack in the higher elevations varies from year to year, because of the aridity of the basin, influencing both the amount and duration of spring runoff. The U. S. Geological Survey's gaging station located near Rome, Oregon, records streamflow from about 8,000 square miles of drainage in the Owyhee River Basin at this site. This station's period-of-record data of fortyone years (1949-1990) indicates that average annual discharge is 995 cubic feet/second (720,900 acre-feet/year) with a maximum discharge of 41,400 cu.ft./sec. on February 19, 1986, and a minimum flow of 42 cu.ft./sec. on August 12, 1954.

Owyhee

The mainstem of the Owyhee River from the Idaho border downstream to the backwater of the Owyhee Dam is approximately 154.5 river miles in length (Figure 1). The main stream channel falls approximately 1420 feet, from 4090 feet mean sea level (msl) at the border to 2670 feet msl at the dam. The average drop is approximately 13 feet per mile. The main river channel bottom in many reaches is confined and flows directly on bedrock. While other areas along the river are quite broad, with irrigated hay meadows in the floodplain. Management of a streamflow in the basin consists of the impoundment of waters in the Owyhee Dam for irrigation, flood control and most recently for power production. Numerous small off-channel reservoirs impound waters for irrigation and livestock throughout the basin. Ownership and management of the reservoirs are scattered among several private, public, and federal entities.

West Little

The mainstem of the West Little Owyhee River is approximately 57 stream miles in length (Figure 2). From the headwater at an elevation of 6,670 feet msl the river falls 2,650 feet to its confluence with the main Owyhee River at 4,020 feet msl. The average drop is approximately 47 feet per mile. The river's main tributary, Toppin Creek, is about 35 stream miles in length and falls 1,910 feet over its course with an elevation range of 6,060 feet msl in the headwaters to 4,150 feet msl at the confluence with the West Little. The stream gradient of Toppin Creek over its last five mile is extremely steep and falls an average of 160 feet per mile, more than 3% in this reach. Although flow data does not exist for either of these watersheds, the mainstem of West Little drains an area of approximately 125,050 acres (195.4 sq. mi.) while Toppin Creek drainage contributes about 72,240 acres (112,9 sq. mi.) to the entire West Little Owyhee River watershed of 197,290 acres (308.3 sq. mi.).

North Fork

The mainstem of the North Fork Owyhee River is approximately 30 stream miles in length (Figure 3). From the headwaters at an elevation of 6,770 feet msl the river falls 2,810 feet to its confluence with the Middle Fork at 3,960 feet msl. The average drop is approximately 67 feet per mile on the designated section. The mainstem then continues an additional one-half stream mile downstream until it joins the main channel of the Owyhee River. Although historical long-term flow data does not exist for this watershed, the mainstem of the North Fork Owyhee River drains an area of approximately 141,500 acres (221.1 sq.mi.) with an additional 68,750 acres (107.4 sq. mi.) contributed from the Middle Fork before flowing into the Owyhee River. The main channel of the North Fork flows continuously throughout the year, although flow diminishes considerably in mid-summer after the runoff period.

Figure 1

RIVER PROFILE -- NATIONAL WILD AND SCENIC OWYHEE RIVER

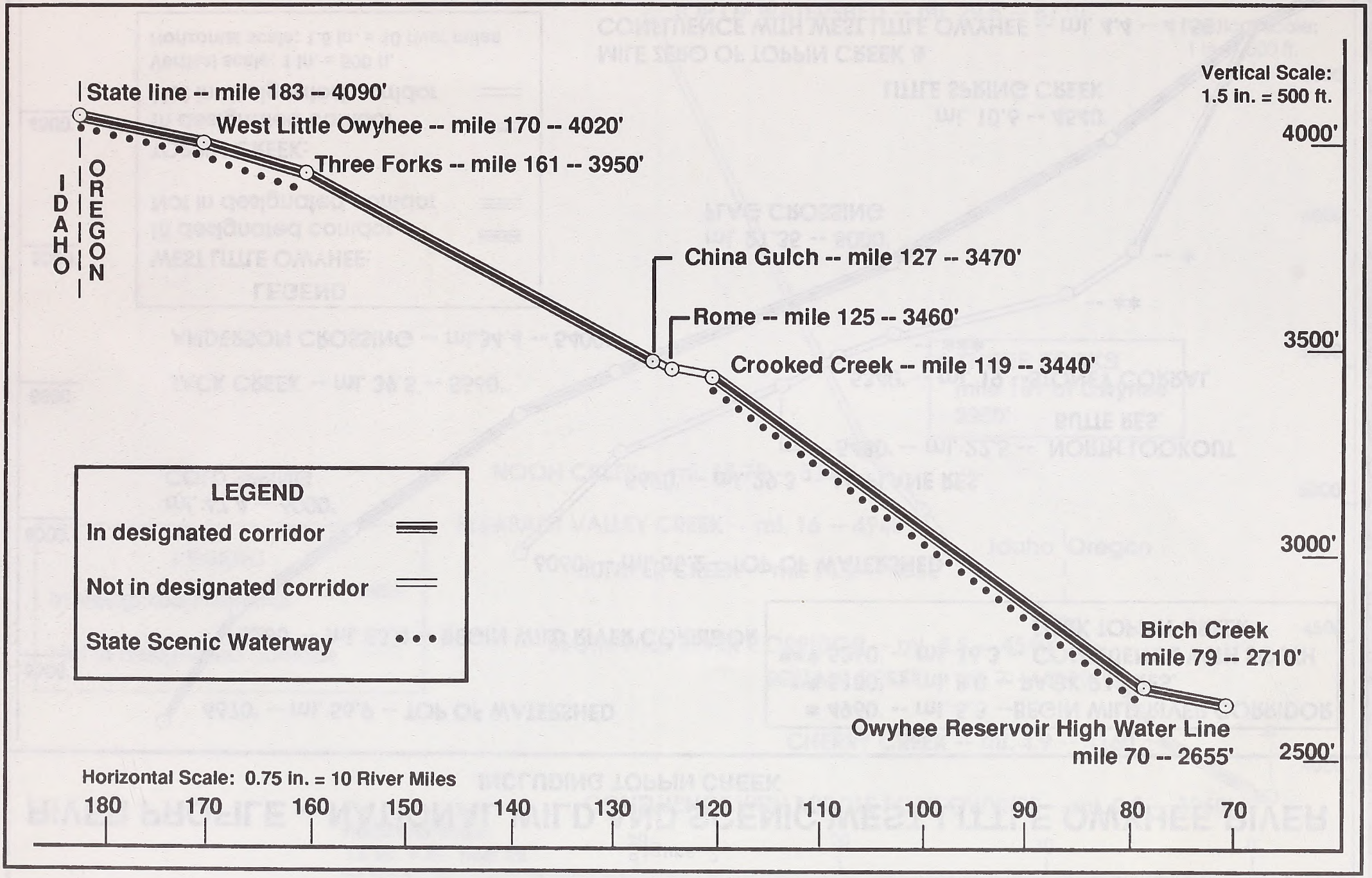


Figure 2

RIVER PROFILE -- NATIONAL WILD AND SCENIC WEST LITTLE OWYHEE RIVER

INCLUDING TOPPIN CREEK

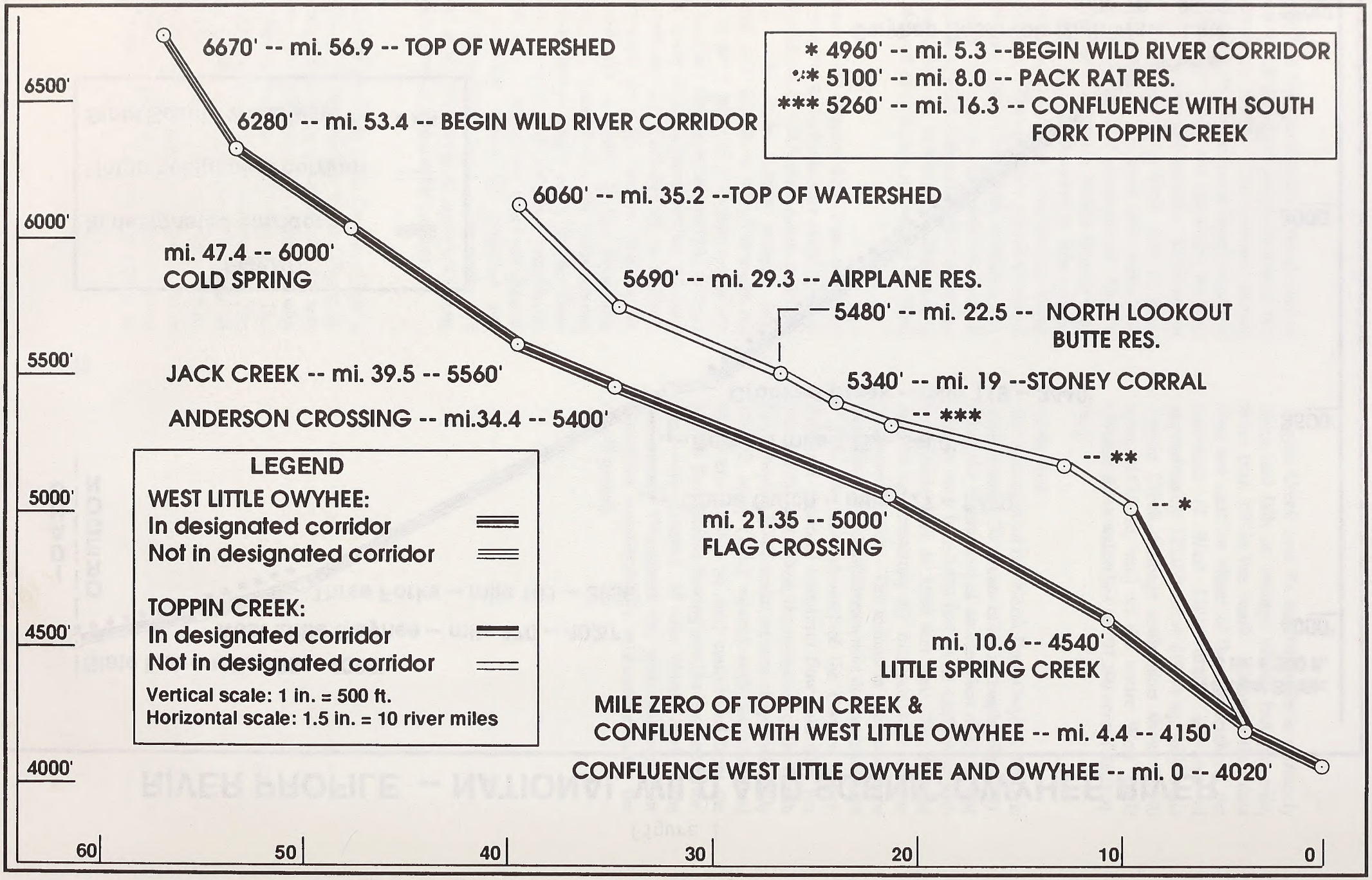
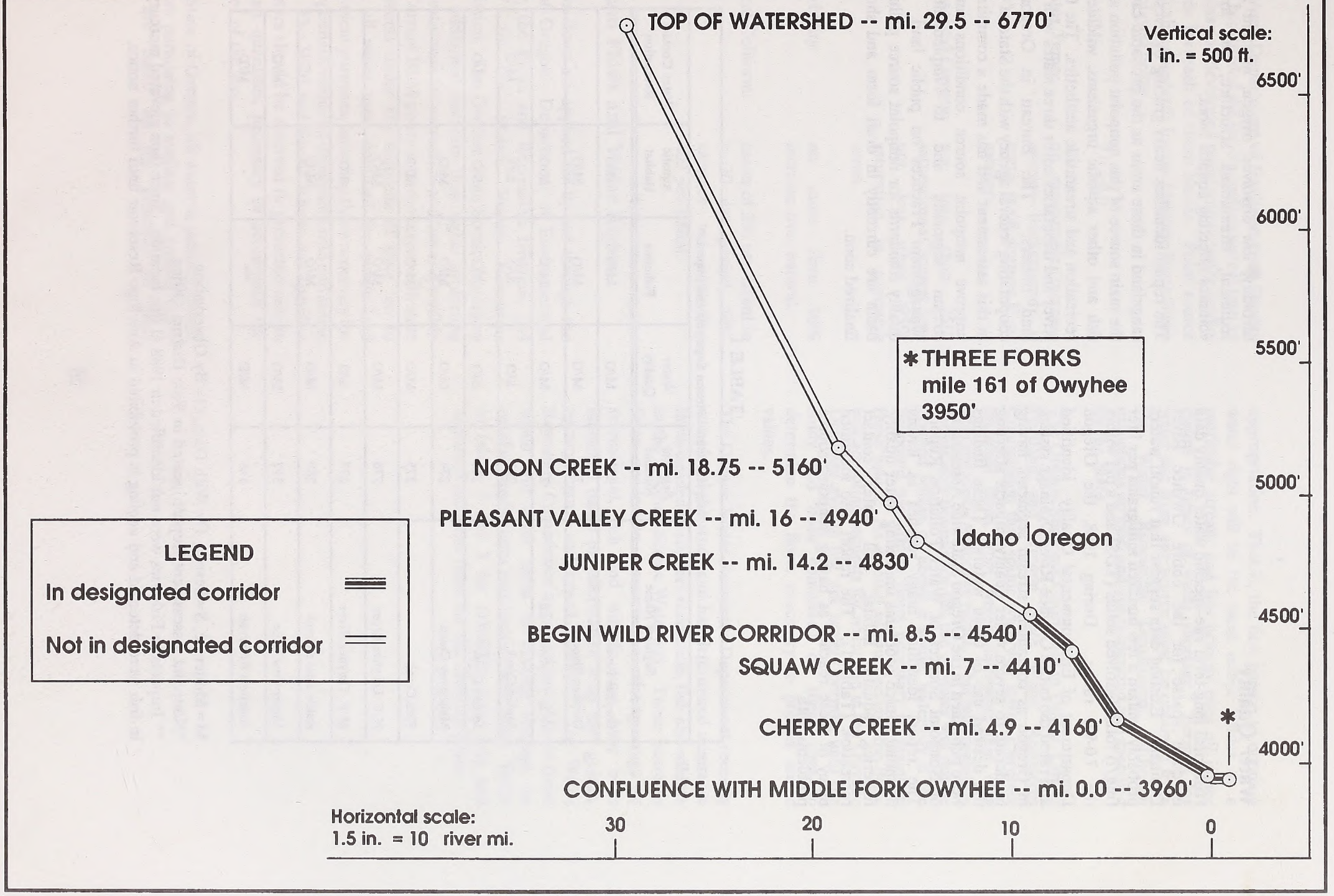


Figure 3

RIVER PROFILE -- NATIONAL WILD AND SCENIC NORTH FORK OWYHEE RIVER



Water Quality

Historical long-term site-specific water quality data is quite sparse for the entire Owyhee River Drainage. Existing data suggest that runoff waters probably contain a few hundred milligrams per liter (mg/l) total dissolved solids (TDS) and a pH within the 7.0-9.0 range. During 1988, the Oregon Department of Environmental Quality identified and rated the entire Owyhee River Drainage system in Oregon as containing stream segments having moderate to severe water quality impacts affecting the desired use of these waters. These findings were published in the Oregon Statewide Assessment of Nonpoint Sources of Water Pollution Report. The report identified many reaches as having nonpoint source problems impacting water quality, fisheries, aquatic habitat, and water contact recreation (Table 1). The report also identified many of these reaches as having nonpoint source problems with turbidity, low dissolved oxygen, nutrient loading, sediment, streambank structure, and low flow volumes affecting aquatic biota.

The report identifies heavy grazing by livestock on rangeland in these areas as the probable cause and the main source of this nonpoint pollution affecting fish and other aquatic organisms, wildlife, water recreation and streamside aesthetics. The Owyhee River and tributaries cover three states with various land owners. The Bureau in Oregon is a cooperating federal agency with the State of Oregon in this assessment and has made a commitment to improve nonpoint source conditions impacting stream segments and to implement Best Management Practices on public land. Water quality standards for nonpoint source pollution by basin are currently in draft form and should be finalized soon.

TABLE 1

Nonpoint Source Stream Segments and Impacts*					
Segment Name	Segment Number	Water Quality	Fisheries	Aquatic Habitat	Water Contact Recreation
Owyhee River	231	M/O	M/O	M/O	-
Owyhee River	232	M/O	M/O	M/O	-
W.L. Owyhee River	233	M/O	M/O	M/O	-
Jordan Creek	241	S/O	S/O	S/O	M/O
Jordan Creek	242	S/O	S/O	S/O	M/O
Mahogany Creek	274	M/O	M/O	M/O	-
Fish Creek	275	M/O	M/O	M/O	-
N.F. Owyhee River	276	M/O	M/O	M/O	-
M.F. Owyhee River	277	S/O	S/O	S/O	-
Rattle Snake Creek	280	M/O	M/O	M/O	-
Upper Cow Lake	317	M/O	-	-	M/O
Antelope Reservoir	318	M/D	**	-	M/D

M=Moderate, S=Severe, D=With Data, O=By Observation
*Nonpoint Assessment Report located in Vale District Office.
** Impacts to Fisheries were not identified in 1988 at this location. Since then elevated mercury levels in fish were detected and angling is prohibited in Antelope Reservoir until further notice.

The Oregon Department of Environmental Quality (DEQ) has divided the state's surface waters into 19 sub-basins and developed point source water quality standards for each of these basins. Point source water quality standards for the Owyhee River Basin are displayed below.

1.) Ph: 7.0 - 9.0

2.) Water Temp: no measurable increase above background if temp. is 68 degrees F. or greater.

3.) Dissolved Oxygen: not less than 75% saturation at season low; not less than 95% saturation in spawning areas.

4.) Turbidity: no more than 10% increase over natural.

5.) Fecal Coliform: mean of 200 per 100ml in a 30 day period, 10% samples not exceeding 400 per 100ml.

Instream Flows and Water Rights

Instream flows are applied for by and through the State of Oregon's Department of Environmental Quality, the Parks and Recreation Division, and ODFW to the State's Water Resources Commission. The Owyhee State Scenic Waterway carries additional instream flow rights protecting scenic waterways for recreation and fish and wildlife uses. Current BLM policy is to cooperate with state governments under the umbrella of state law to protect all water uses identified for public land management purposes, including those necessary for flow-dependant values on designated wild and scenic rivers. The Wild and Scenic Rivers Act specifies that waters should be reserved or protected only in minimum quantities necessary to accomplish the purposes of the Act.

In the State of Oregon, all water is publicly owned and laws pertaining to surface and ground water usage are based on the principle of prior appropriation. That is, the first person to obtain a water right will be the most senior holder on a particular stream and has priority over all junior claims in times of water shortage. Permits for water use from any source must be obtained from the Water Resources Department, although exceptions do exist and are recognized and specified by the State.

The Oregon Supreme Court held in Diak v. City of Portland and Oregon State Water Resources Commission that scenic waterway statutes protect instream flows from water diversions that may degrade scenic waterway values. This interpretation means new permits for the use of water will not be granted within or above a scenic waterway if the proposed use affects flows necessary to maintain these values. As a result of this decision the State was accepting requests for water use in the Owyhee Drainage system but not issuing permits until the study had been completed on these sites to determine the flows necessary to protect scenic values.

The Oregon Water Resources Department recently completed the study and has determined minimum flows needed to support recreation, fish and wildlife in the Owyhee Scenic Waterway. These instream flows needed to preserve the existing range of recreational, fish and wildlife uses have been identified based on information from user guides, agency reports and expert opinions. The Water Resources Commission approved use of these flows which will assist them in making findings on pending applications and future water rights. Refer to tables 2 and 3 for OWRD's flow data and approved instream flows for the Owyhee River.

TABLE 2

Flow-dependent USES AND VALUES OWYHEE RIVER			
Use	Flow Range (cfs)	Season of Use	Intensity of Use
Angling	-	Spring - Summer	moderate
Drift Boat	1,200-8,000	February - June 15	low
Canoe	60+	June 15 - October	low
Kayak	1,000 - 8,000	March - June 15	low
Raft	1,000 - 8,000	March - June 15	high
Fish & Wildlife	-	All year	-

TABLE 3

FLOW DATA FOR THE OWYHEE SCENIC WATERWAY						
Mean Monthly Flow (cfs) measured near Rome (gage #13181000)						
	Minimum Flow	Maximum Flow	Average Flow	Flow for Fishery	Recreation Flow	Approved Scenic Waterway Flows
January	113	4,461	394	95	-	95
February	129	8,820	834	95	-	95
March	232	9,404	1,665	100	1,200	1,200
April	205	16,958	2,241	120	1,200	1,200
May	124	10,467	1,475	120	1,200	1,200
June	61	4,870	653	120	1,200/60	1,200/120
July	61	1,034	229	100	60	100
August	63	451	145	100	60	100
September	62	360	134	100	60	100
October	85	442	152	95	60	95
November	107	592	195	95	-	95
December	103	2,898	258	95	-	95

Owyhee
ODFW is in the process of applying for instream flows rights on the Owyhee. The application requests optimal flows for the lower, middle and upper segments of the river within Oregon for the maintenance, reproduction and growth of various fish species, and for recreation and aesthetic benefits (Table 2).

West Little
ODFW is in the process of applying for instream flow rights on the entire West Little Owyhee River. The application is for desired flows for the maintenance, reproduction, and growth of redband trout, and recreation and aesthetic benefits of the stream (Table 2).

North Fork
An instream flow application has been filed by ODFW for the entire length of the North Fork Owyhee River from the stateline to the confluence with the Owyhee River. ODFW requests optimum flow for the maintenance, reproduction, and growth of redband trout, and recreation and aesthetic benefits of the stream (Table 2).

TABLE 4

Instream Flow Requirements Determined By ODFW

River	To	Flow Requirements (cubic feet/sec.)											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lower Owyhee	Head of Owyhee Reservoir RM 75.0	130	130	130	150	150	150	130	130	130	130	130	130
Middle Owyhee	USGS Gage 13181000 RM 121.2	95	95	100	120	120	120	100	100	100	95	95	95
Upper Owyhee	Above Tudor Warm Springs RM 163.5	45	45	50	65	65	65	65	65	50	45	45	45
North Fork Owyhee	Upstream at RM 1.0	7	7	10	15	15	15	15	15	10	7	7	7
Middle Fork Owyhee	Upstream at RM 0.25	4	4	6	8	8	8	6	6	6	4	4	4
West Little Owyhee	Confluence with Owyhee RM 0.0	20	20	20	30	30	5	5	5	5	20	20	20

RM = River mile

D. RESOURCE ACTIVITIES AND LAND USES

Grazing

Livestock have been grazing in the area since the middle 1800's. In 1936 the first Grazing Licenses were issued. Carrying capacities were used as criteria and allotment boundaries were set by adjudication in the 1950's. Grazing allotment boundaries were set at adjudication as the middle of the Owyhee River and its tributaries (Maps 3A, 3B, 3C, 4A, 4B). However, most of the National Wild and Scenic Owyhee River bottom lands were not allocated for livestock Animal Unit Months (AUMs). Table 3 shows the grazing allotments affected by this management plan.

The Southern and Northern Malheur Management Framework Plan states that "livestock would be excluded from the Owyhee River where alternate sources of water could be provided above the rim." The 1983 Grazing Environmental Impact Statement and the 1984 Rangeland Program Summary provided direction for livestock grazing on BLM lands throughout the Owyhee canyon lands. That direction included riparian improvement objectives for certain bottomlands of the Owyhee system and livestock exclusion areas.

Developed water sources exist up on the plateaus, some of these dry-up or freeze depending on the season. The Owyhee River system is used as a water source for many of these allotments, increasingly during this drought period. Areas of concern include Three Forks, Deary Pasture, Sand Hollow, Sand Springs, Lambert Rocks, Squaw Creek on the North Fork Owyhee, and the upper reaches of West Little Owyhee River. Portions of these areas cover state land grazing leases.

Trailing is permitted through several areas of the Owyhee system. These areas are: The- Hole-in-the-Ground, Bogus Creek, Bull Creek Rye Grass Creek, Sand Springs, Three Forks, and Spring Creek Crossing. Trailing of livestock should take one day or less. When water is not available outside the canyon within a days trailing period, the livestock would use the river as a water source for one day and then move on out of the canyon.

Brown's Ridge area (refer to map 3C) is a combination of State of Oregon, private, and public lands. The Oregon Division of State Lands (DSL) manages the state lands for such things as grazing of livestock. Presently, two ranchers lease these lands around and within the Owyhee Wild River System from DSL. The season of use for livestock operations on this leased state land is usually spring through fall. Historical use shows trailing through Three Forks as the only feasible access to these lands to the south.

Wild Horses

A portion of the Sand Springs Wild Horse Herd Management Area (HMA) lies within the Owyhee Wild and Scenic River corridor, with the east boundary of the HMA being the river. Those lands from the confluence of Crooked Creek and the Owyhee River north approximately eighteen miles along the west side of the river are within the HMA (Map 2A).

In accordance with the Wild Horse and Burro Act of 1971, Public Law 92-195, as amended, the wild and free roaming horses on public lands are protected, managed and controlled by the BLM. Population management levels for the Sand Springs Herd were established by the Southern Malheur Rangeland Program Summary (RPS) dated January, 1984. Minimum and maximum wild horse population levels allocated are 100 and 200, respectively or an appropriate management level (AML) of 150.

An Interior Board of Land Appeals decision of June, 1989 concluded that the AML for a horse population is one in which a thriving natural ecological balance between horses, wildlife, livestock, and vegetation occurs. Excess animals are defined as those which must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

The population can be expected to increase about 22% annually. In order to maintain the herd within the established population level, excess horses must be removed. Approximately 100 head must be removed once every four years using a helicopter and trap. Trap sites are located outside of the NWSR corridor.

Table 5 Livestock Grazing

ALLOTMENT	ACRES	AUMS	APPROX. # CATTLE	SEASON OF USE	GRAZING SYSTEM
Owyhee River					
Whitehorse[1] [2]	27,945	4,413	1,954	04/08-06/15	Flip flop use of 2 pastures (every other year a pasture is used)
Willow Creek[1]	76,114	10,521	2,104	04/01-08/31	Deferred rotation
Raburn	5,685	1,040	220	Spring-Fall 04/01-12/31	Deferred rotation
Arock[1]	64,286	10,507	2,101	04/01-10/15	Deferred rotation/ rest rotation
Ambrose Maher	3,625	580	229	10/15-05/15	Season long
Jackies Butte[1]	220,685	14,734	2,250	04/01-10/30	Deferred rotation
Saddle Butte	190,480	6,426	1,764	10/01-03/31	WO Season long
Bogus Creek	4,529	250	174	01/01-03/31	WO Season long
Morcum	5,566	220	55	11/01-02/29	WO Season long
West Cow Creek	139,885	11,900	2,080	04/01-10/31	Deferred rotation
Anderson[3]	39,404	2,964	800	03/01-06/20	Deferred rotation
Birch Creek[4]	8,851	1,099	133	04/01-02/28	Deferred rotation
Mahogany[1,5]	304,807	29,267	4,200	03/01-02/28	Various, deferred rotation, winter
Three Fingers[6]	127,189	9,981	1,200	12/01-04/01	Deferred rotation, winter
Quartz Mountain	83,326	7,476	825	11/01-04/15	Deferred rotation, winter
West Little Owyhee River					
Star Valley[1]	189,141	6,901	1,022	03/01-09/30	Deferred rotation
Louse Canyon[1,7]	131,663	11,533	2,197	03/01-09/30	Deferred rotation
Campbell	158,957	14,514	1,900	03/01-10/15	Deferred rotation
North Fork Owyhee River					
Cherry Creek	595	65	25	04/08-06/20	Season long

[1]Denotes Community Allotment

[2]Also affects North Fork Owyhee

[3]Also affects West Little Owyhee

[4]Includes Fenced Federal Range

[5]This allotment has been split by decision into 5 allotments, the decision is under appeal, the allotments are being run as temporary allotments pending appeal. The pasture affected by W&S River is Blackrocks (THree Fingers Allotment) 400 C, 12/01-04/01.

[6]Temporary allotment in Mahogany

[7]Also affects main/south fork Owyhee

Recreation Activities

Recreation Activity Preference

The Owyhee River corridor, including the North Fork and West Little Owyhee Rivers, provides unsurpassed opportunities for primitive recreation activities. The corridor's remote location, pristine terrain and feeling of solitude allow the visitor to experience wilderness on three of the nation's truly wild rivers. Whitewater boating, both commercial and non-commercial, is by far the most popular recreation endeavor. However, outdoor enthusiasts also visit the area for hunting, fishing, camping, backpacking, photography, viewing wildlife, nature study, site-seeing, rock climbing, horseback riding and rockhounding.

The 1980 National River Recreation Study demonstrates that most visitors float the Owyhee River to run rapids, view scenery and camp. The possibility of several portages and bolder sewn rapids make the medium sized raft the preferred craft followed by kayaks, canoes and drift boats. Approximately 50 percent of the boaters enjoy visiting archaeological and historical sites, and 42 percent appreciate hiking in the canyon and side drainages during their river trip.

Fishing on the Owyhee is usually described as fair to good. Frequent fluctuations in the weather, water clarity and level may at times produce a poor fishing day. Hunting can be good to excellent for mule deer, bighorn sheep, chukar partridge, sage hen and quail.

North Fork and West Little Owyhee River canyons feature high quality off-trail wilderness backpacking and day-hiking activities. The rugged canyons' beautiful scenery and variety of wildlife provide a perfect setting for photography and nature study. Fishing and swimming in the cold water pools add to the diversity of activities enjoyed within these canyons. The North Fork canyon provides superior hunting opportunities over the West Little due to the abundant wildlife cover and a wider corridor. Horseback riding and rock climbing hold high recreation potential for both canyons. Also, kayakers float a 12 mile run down the North Fork during spring run-off. The run starts at North Fork Campground in Idaho and ends at the confluence with the Owyhee at Three Forks.

Seasons and Times of Use

During normal water years the Owyhee float season begins as early as February and lasts until the end of July. However, cold unpredictable weather in February inhibits use, while water levels in July are adequate only for kayaks and canoes. Water flow and length of season depends on winter snowpack and runoff rates, which will vary from year to year. Usually boaters wait for the better weather in May and June making these months the busiest (75% of floater in 1991, Table 6). The most active weekend is consistently Memorial Day.

Seven of the past 10 years have been below normal water years resulting in very low visitation (Table 4). During this time, hearty boaters have pushed the limits of their skills and equipment successfully floating the river with small to medium rafts at levels as low as 500 to 600 cubic feet per second (cfs).

Floating on the North Fork occurs during the spring runoff. This is the only time of the year that the North Fork carries enough water for floating. The BLM has no record of boating on the West Little, but any attempt would be limited to the spring runoff.

Also, the spring is the best time of the year for viewing the desert lushness and wildflowers. Summer and Fall are the preferred seasons for backpacking and hiking. Numerous river crossings lead these ambitious outdoor enthusiasts to select the seasons of warm weather and low water levels. Moderate angling use occurs throughout spring and summer.

Party Size

The river's characteristics including difficulty and access separate boaters onto three river segments. These segments known as the upper (above Three Forks), middle (Three Forks to Rome) and lower (below Rome) are natural breaks in which to calculate visitor statistics. The average party size for commercial trips during the past 10 years on the upper segment equals eight floaters. The middle segment carries about seven participants per group and approximately 11 people comprise a commercial trip on the lower segment. The size of non-commercial groups on the upper segment come to eight, middle segment groups average around five people and lower segment group size equates to six.

Group size limit on the upper and middle segments is 15 people, while the lower segment is 20.

There are no party size estimates for other recreation activities.

Place of Origin

Idaho is the most frequent state of origin for visitors on the Owyhee. Approximately, 48 percent of the commercial outfitters and registered non-commercial boaters in 1991 indicated they lived in Idaho (Table 6). Oregon follows Idaho with 40 percent, succeeded by Washington with six, Nevada with three, Utah with two and California with one percent.

The National River Recreation Study of 1980 indicates that approximately 60 percent of the boaters lived in Oregon, 14 percent in Idaho, 12 percent were from Washington, seven percent from California and seven percent from other states.

Most backpackers come from Idaho and Oregon. Most anglers and hunters are residents of Oregon, however, some out-of-state big game hunters do visit the canyons in search of trophies.

Visitation Estimates[1]

BLM began recording visitor use estimates on the Owyhee in 1974. The total number of boaters that first year came to 482, followed by 2,057 in 1980 making that the highest use year to date. Total visitation for 1991 is 279 floaters representing the forth lowest level on record. Water level and visitation on the Owyhee are directly proportional. Since the drought began boaters have been left high and dry, and looking forward to the first normal water year. Visitation estimates for that year are expected to exceed the 1980 figure.

Commercial use on the upper segment, which a portion of flows through Idaho, is regulated by the Idaho Outfitters and Guides Board. This board establishes guidelines for the number of outfitters per river in Idaho. The regulations state that no more than six commercial outfitters will be allowed on the main stem of the Owyhee River from Duck Valley Reservation to the Oregon stateline. Therefore, in nearly all cases, no more than six outfitters will be on the Oregon portion of the upper segment, since the most practical river access is above the stateline.

The largest non-commercial visitation estimate for the upper segment came in 1983 with about 80 visitors. Commercial visitation reached its highest point in 1989 with 63 guests. Optimum water flow (reading at Rome) for rafts above Three Forks falls between 2,000 and 6,000 cfs. During 1991 water flow obtained this level for only six days (Table 7). Approximately 37 people floated the upper segment with commercial outfitters, and no statistics are available for non-commercial floaters at this time (Table 5).

The highest number of visitors per year on the middle segment came in 1980 with 263 non-commercial and 219 commercial floaters. The preferred water flow (reading at Rome) for rafting this segment is between 1,500 and 3,000 cfs. During the 1991 season just nine days fell within the optimum floating level. Approximately 29 non-commercial boaters went down the middle segment this season. Non-commercial boaters have a more flexible schedule than commercial groups which allow them the opportunity to respond to the relatively quick rise and fall period of the Owyhee. Commercial use on the middle segment was zero for 1991.

Non-commercial visitor statistics on the lower segment peaked in 1984 with 1,077 boaters, and in 1980 for commercial guests with 771. Below Rome (reading at Rome) the optimum water level for rafting comes between 1,000 and 8,000 cfs. This year the preferred level only appeared on merely 13 days. Approximately, 143 non-commercial and 70 commercial boaters took advantage of the short season.

Fishing use is moderate and usually done in conjunction with backpacking, hunting and late season boat trips. There are no estimates of the amount of hunting, backpacking or day use that occurs within the canyons.

[1]No noncommercial visitor statistics are available for the upper segment in 1990-1991. Low water levels is the main cause for low use and no documented statistics in 1987 and 1988. Low water prevented commercial trips on the middle segment in 1991.

Table 6

1979 Through 1991 Season REGISTERED Visitation

	79	80	81*	82	83	84	85*	86	89*	90*	91*	Total
Upper Segment (Above Three Forks)												
Non-Commercial	24	0	0	40	80	24	16	23	50	-	-	257
Commercial	8	16	0	30	23	48	17	47	63	22	37	311
Total	32	16	0	70	103	72	33	70	113	22	37	568
Middle Segment (Three Forks to Rome)												
Non-Commercial	204	263	23	239	144	85	97	198	164	34	29	1480
Commercial	118	219	5	117	127	62	2	35	52	3	0	740
Total	322	482	28	356	271	147	99	233	216	37	29	2220
Lower Segment (Below Rome)												
Non-Commercial	721	800	50	936	1010	1077	394	704	494	121	143	6450
Commercial	438	771	90	325	592	461	271	556	256	52	70	3882
Total	1159	1571	140	1261	1602	1538	665	1260	750	173	213	10332
River Total												
Non-Commercial	949	1063	73	1215	1234	1186	507	925	708	155	172	8187
Commercial	564	1006	95	472	742	571	290	638	371	77	107	4933
Total	1513	2069	168	1687	1976	1757	797	1563	1079	232	279	13120

*Below normal water year

No statistics were collected for the low water years of 1987 and 1988.

Table 7

1991 (Low Water) Season REGISTERED Visitation

Registration of visitors and outfitters on the Owyhee River for 1991 began March 8 and ended June 15, 1991.

	Number of Visitors	Number of Launches	Average Group Size	Average Trip Length	Visitor Days
Upper Segment (Above Three Forks)					
Non-Commercial*	-	-	-	-	-
Commercial	37.0	4.0	9.0	4.0	148.0
Total	37.0	4.0	-	-	148.0
Middle Segment (Three Forks to Rome)					
Non-Commercial	29.0	11.0	2.5	2.5	72.5
Commercial	0.0	0.0	0.0	0.0	0.0
Total	29.0	14.0	-	-	72.5
Lower Segment (Below Rome)					
Non-Commercial	143.0	28.0	5.0	5.0	715.0
Commercial	70.0	7.0	10.0	6.5	455.0
Total	213.0	35.0	-	-	1170.0
River Total					
Non-Commercial	172.0	42.0	4.0	-	787.5
Commercial	107.0	11.0	10.0	-	603.0
Total	279.0	53.0	-	-	1390.5

* No statistics available at this time

Table 8

1991 Season REGISTERED Launches Per Month, Craft Used and Visitor Origin

	March	April	May	June	Total
Launch	5	8	34	6	53
Raft	0	10	37	2	55
Kayak	3	9	30	4	46
Canoe	9	9	14	0	26
Drift Boat	0	0	4	0	1
Other	0	3	2	0	5
Total	10	29	37	10	136
California	0	1	0	0	1
Idaho	2	10	84	0	96
Nevada	0	1	0	0	5
Oregon	0	3	59	14	80
Utah	0	1	4	0	5
Washington	0	9	4	0	13
Total	6	24	157	14	201

Table 9

1991 Owyhee River Flow Statistics (Cubic Feet/Second)

	March	April	May	June
1	396	382	858	877
2	412	420	719	942
3	496	464	858	877
4	815	478	952	747
5	591	420	860	664
6	2105	420	686	606
7	1241	592	607	575
8	883	382	602	559
9	638	592	572	545
10	538	491	643	531
11	488	447	646	494
12	422	412	685	442
13	425	340	686	404
14	412	352	1110	403
15	408	337	977	359
16	659	348	719	347
12	740	990	2441	341
18	622	356	3164	317
19	638	33	3200	305
20	845	375	5000	291
21	821	340	4040	274
22	617	368	2558	258
23	622	990	1988	255
24	478	834	1546	252
25	414	659	1225	275
26	412	643	1066	283
27	383	617	965	309
28	363	990	913	305
29	344	901	858	305
30	321	1138	858	417
31	306	-	977	-

Vehicle Access

Owyhee

Upper Section
Access to the 26 miles of the upper section is located in Idaho and Nevada. Access to the East Fork in Idaho is located 12 miles within the Duck Valley Indian Reservation, or at Garat Crossing where the El Paso Natural Gas Pipeline crosses the river, or at Crutchers Crossing near the confluence with the South Fork. Access to the South Fork is at the crossing of the El Paso Natural Gas pipeline in Nevada, or the YP Ranch in Nevada, or the 45 Ranch in Idaho. Access to the pipeline crossings require the use of four-wheel drive vehicles within the canyons. The put-in points at 45 Ranch, YP Ranch and the Duck Valley Indian Reservation can be reached with a high clearance, two-wheel drive vehicle **with the approval of the private property owners or officials of the reservation.** All principle access routes may be unusable during periods in the spring due to muddy road conditions.

Middle Section
A well maintained dirt road leads south from Highway 95 to the rim at Three Forks, where a rough road passable by high clearance vehicles descends to the river's edge (Refer to map 3C). There is no road access to the river from Three Forks to Rome. The BLM has developed a scenic overlook 15 miles downstream from Three Forks along the Owyhee Canyon's east rim.

Lower Section
A short graveled spur lead to a developed river access just south of the Highway 95 bridge crossing at Rome (Map 3B). Facilities at Rome Launch Site include a graded boat ramp, parking area, toilets, and potable water. Overnight camping is allowed and picnic tables and campfire rings are provided. One dirt road below Rome provides public vehicle access to the river (Map 3A). The road, Birch Creek, requires the use of high clearance, four-wheel drive vehicles.

The final take-out is Leslie Gulch on the Owyhee Reservoir (Map 3A). Approximately 12 miles of slack water must crossed to reach Leslie Gulch. Recreation facilities at Leslie Gulch include a boat ramp, restrooms, parking area, camping area, and trash receptacles.

West Little
Access to the West Little Owyhee River is at Anderson Crossing (Map 4B) on the Star Valley Road. Visitors should use a high clearance vehicle and four-wheel drive is recommended during wet road conditions.

North Fork
The access route to Three Forks, described above for the Owyhee will provide access to the mouth of the North Fork (Map 3C). Idaho provides another access opportunity to the North Fork Owyhee. Head east from Jordan Valley, taking the first right fork, and follow the signs to Juniper Mountain. Idaho BLM maintains a campground facility near the North Fork bridge crossing. The sites includes a handicap-accessible toilet, picnic tables and fire rings.

Wilderness Study Areas

Wilderness Study Areas (WSAs) are managed under FLPMA and BLM's "Interim Management Policy and Guidelines for Lands Under Wilderness Review" (IMP). Both FLPMA and the IMP require BLM to protect the wilderness values within these WSAs until such time as Congress designates them as wilderness or releases them from wilderness study status.

Owyhee
The Owyhee National Wild and Scenic River passes through four Wilderness Study Areas (WSAs). These WSAs are Blue Canyon (OR-3-73), Owyhee Breaks (OR-3-59), Lower Owyhee Canyon (OR-3-110), and Owyhee Canyon (OR-3-195). Maps 1A through 1C show these WSA boundaries related to the Owyhee River corridor. All the Wild and Scenic River corridor acreage within these WSAs is recommended by the BLM as suitable for designation as wilderness.

West Little
The West Little Owyhee National Wild and Scenic River passes through the Owyhee Canyon WSA (OR-3-195) and the Upper West Little Owyhee WSA (OR-3-173). Maps 2A & 2B show the WSA boundaries related to the river corridor. All the Wild and Scenic River corridor acreage within these

WSAs is recommended by the BLM as suitable for designation as wilderness.

North Fork
The North Fork Owyhee National Wild and Scenic River overlaps the Owyhee Canyon WSA (OR-3-195) for the last 1/3 mile of its preliminary boundary before joining the main Owyhee River. Map 1C shows the WSA boundary related to the river corridor. The WSA acreage within the North Fork NWSR is recommended by BLM as suitable for wilderness.

Areas of Critical Environmental Concern

An Area of Critical Environmental Concern or ACEC is a designation given to lands in need of specialized management measures. The Owyhee River ACEC was designated in 1983 to protect the scenic and geologic values of the Owyhee River and adjacent land forms within the line of site or within 1/4 mile of the canyon rim. The ACEC boundary approximates the wild and scenic river boundary covering the same two segments of the wild and scenic designated corridor. The ACEC encompasses approximately 30,500 acres of the Owyhee River canyonlands.

Agriculture

There is only one agricultural permit authorized along the Owyhee River. This permit authorizes use of federal public land for hay production. BLM authorized a right-of-way authorization for an irrigation pump to pump water from the Owyhee River to nearby fields. The pump is located across river from the Rome Launch Site (outside the designated corridor).

Minerals

Refer to page 49 for Wild and Scenic River Act requirements related to mining and mineral leasing. Also refer to Appendix D for mining standards in wild river corridors.

Owyhee
No mining claims or mineral/energy leases are found within the Wild and Scenic River corridor nor is any known mineral/energy development or exploration occurring. Some mineral exploration and development has occurred, and continues, near the river in a few locations along its course. The most notable locations are: (1) The Sheep Head mining district, located along the east wall of the Owyhee Canyon approximately one mile downstream from Birch Creek, where several tons of "picture jasper" have been removed from five mining claims since the mid-1960's; and (2) the Rome area, where intermittent exploration for zeolite and fluorite has occurred since the late 1950's.

West Little
There are no mining claims or mineral/energy leases located within this Wild and Scenic River corridor. No known mineral/energy development or exploration has ever taken place in the immediate vicinity of this river.

North Fork
No mining claims or mineral/energy leases are located within this Wild and Scenic River corridor, and no known mineral/energy exploration or development has ever occurred in the area.

Utilities

Although there is no formal utility corridor designation through, across, or over the Owyhee River System, land use planning identified a major right-of-way corridor for a future 500 KV power transmission line. This corridor route was identified in the western right-of-way corridor study. The proposed right-of-way route transverses east to west and crosses the Owyhee River near the mouth of China Gulch, just south of Rome. Pacific Power and Light (PPL) filed for the proposed powerline as their primary route and later the route was moved north of the Owyhee Dam and outside the designated river by a decision from the Secretary of the Interior. However, PPL still wants the proposed corridor route near Rome for future consideration.

Withdrawals

A large portion of the Owyhee River is encumbered with major withdrawals of the Federal Energy Regulatory Commission (FERC) and the Bureau of Reclamation (BR). Hundreds of parcels of land were withdrawn through Executive or Secretarial Orders for power site reserves and reclamation construction projects in the early 1900's. The FERC withdrawals encompass the entire river except from its confluence with the West Little Owyhee to the Oregon-Idaho stateline. The BR withdrawals are confined to approximately the lower 10 miles of the designated wild river below Birch Creek. In the lower reaches of the Owyhee, the FERC and BR withdrawals overlap each other, with the FERC withdrawals being primary and the BR withdrawals secondary.

The BR withdrawals have mineral segregation, eliminating all forms of mineral entry. The FERC withdrawals are not segregated from mineral entry. Therefore, mining activities could potentially take place on the FERC withdrawals outside the 1/4 mile wild river mineral withdrawal boundary.

The Federal Land Policy and Management Act of October 21, 1976 (FLPMA) mandated the Secretary to review existing withdrawals on lands within the National Wild and Scenic River System (NWSRS) and determine whether, and for how long, the continuation of the withdrawal of the lands would be consistent with the statutory objectives of the NWSRS. This withdrawal review was scheduled for completion in October, 1991. However, this review process has been extended to October, 1997.

Because the Wild and Scenic River Act mandates that no construction of dams can occur within designated rivers of the system and that these rivers must remain free-flowing, the withdrawal review of the Owyhee system should be accelerated in order to revocate ineffective withdrawals and allow for sound management.

Land Acquisition

BLM has only transacted one land purchase acquisition on the Owyhee River. This acquisition of approximately 1,087 acres included the Birch Creek and Morrison developed sites along with many tracts of undeveloped land. Management of these properties is under interim directives until this planning phase can develop an effective management strategy. BLM also acquired one scenic easement at the Five Bar Ranch area. This easement covers approximately 107 acres.

Currently, there are plans to make additional acquisitions along the Owyhee River to protect the river resources when and if funding is available and on a willing seller/willing buyer basis. To date, no acquisitions have been made on the West Little or North Fork Owyhee Rivers.

Land Tenure Adjustments

There are plans to make two land exchanges with the State of Oregon. The first is known as "Clean Up II" and includes exchanging both surface and mineral estate. The second is known as the "Split Mineral Estate" land exchange and would involve only the subsurface mineral estate. The "Clean Up II" land exchange could involve the Owyhee and North Fork Owyhee Rivers, while the "Split Mineral Estate" land exchange could involve the Owyhee and West Little Owyhee Rivers.

Negotiations with the State of Oregon continue and no exchange has been finalized. All efforts will be made to protect special management areas such as the river environments.

E. CONSTRAINTS

The following are existing policy or law that would not change or be altered by this plan.

1. Military overflights will continue to occur in the airspace above the Owyhee Wild River System. Increases in number and types of military aircraft and use of chaff and flares will occur as documented in the Final Air Force in Idaho Environmental Impact Statement (1992) prepared by the Air Force. Opportunities for solitude will be reduced. BLM, Oregon and Idaho, reviewed and commented on the EIS (Draft and Final) describing the impacts that would occur to wild river and wilderness values. Refer to Appendix A, map 6 for an illustrated look at the Military Operating Areas and Military Training Routes throughout the Owyhee System.

2. Many individuals or entities in Nevada, Idaho and Oregon own and claim rights to the waters of the Main Owyhee River. Oregon is the only state where these rights have been adjudicated. The largest upstream water withdrawals occur in the Duck Valley Indian Reservation and include Wildhorse reservoir (for irrigation purposes), and Sheep Creek and Mountain View Reservoirs (for recreational purposes. The adjudicated or claimed water rights to the main stem and south fork exceed average flow. If all rights were simultaneously exercised the effect would be to virtually dewater the river. Any remaining flow would result largely form irrigation returns. For example, it is estimated that 80 percent of the water utilized for irrigation on the Duck Valley Indian Reservation returns to the river. However, full utilization of water rights has yet to occur.

3. The Federal court determination for navigability has not been made for the Main, West Little and North Fork Owyhee Rivers. The BLM considers rivers nonnavigable until proven otherwise while Oregon DSL considers there is sufficient evidence to support a claim of navigability on at least the Main and North Fork Owyhee Rivers. (Refer to page 8.)

III. MAJOR ISSUES

A. ADMINISTRATIVE BOUNDARIES

A.1. **Issue:** How should Wild and Scenic river boundaries (for the North Fork and West Little) be set in order to provide appropriate management of resource values and minimum encroachment on private and state lands.

Issue Description: Preliminary boundaries were developed to include the important resources along the river corridor and within the rivers' immediate environment. Some of the boundaries, especially the North Fork, includes private and state lands. These land owners are concerned with restrictions on their use of the land and the potential for future development. The Owyhee River boundaries were set through the 1986 plan. No conflicts have arisen over the existing boundary, therefore, it will remain as is.

Permanent boundaries for the North Fork and West Little Owyhee Rivers must be set through this planning process to be consistent with the Wild and Scenic Rivers Act. River boundaries can vary greatly from extremely narrow in areas with vertical walls immediately adjacent to the river to distances of 1 mile or greater in areas with an open viewshed. However, the administrative boundary cannot exceed an average of 320 acres per river mile.

B. RECREATION USE LEVEL

B.1. **Issue:** Should a carrying capacity be set and how?

Issue Description: Although current use levels are low due to the drought, there is concern over future use levels when high water levels come back. The Main Owyhee Wild River has use limits on party size and control periods, but current party size may not be appropriate at certain camp sites, especially on the middle section. The West Little and North Fork Owyhee Rivers have no carrying capacity type limits. One of the best qualities of the Owyhee Wild River System is its pristine environment and the opportunity for a primitive type recreation experience.

C. RECREATION ACTIVITIES

C.1. **Issue:** Develop an Owyhee Canyonlands hiking trail system.

Issue Description: There has been some public and BLM interest in constructing a hiking trail system within the Owyhee Canyon and its tributaries especially along the North Fork from the Idaho BLM campground to Three Forks. Currently, use levels are low due to the remoteness of the area and difficulty in hiking in and out of the steep canyon. Other concerns include impacts on raptors and bighorn sheep and the outstanding primitive type recreation opportunities.

C.2. **Issue:** Should BLM provide potable water, i.e., establish water caches, develop springs for boaters?

Issue Description: Some private boaters are concerned about the remoteness of Owyhee canyon and the lack of potable water.

C.3. **Issue:** How will BLM manage Birch Creek?

Issue Description: BLM has acquired the developed properties known as the Birch Creek and Morrison (Pinnacles) Ranches. The site has several cabins, barns, and other facilities. The area is potentially eligible for inclusion in the National Register of Historic Places due to the historic structures and the significance of the historic landscape. Interim management of the site includes a designat-

ed camping area, a float boat take-out site, and the opportunity for other recreation activities such as hiking, fishing, nature study, rockhounding, etc. A caretaker is on-site full time.

C.4. **Issue:** Will there be hunting access limits/shooting restrictions around Birch Creek?

Issue Description: Since the area is currently an administrative and recreation site managed by BLM, hunting and shooting limits are required by law. For safety concerns, an interim management boundary was established with input from ODFW to restrict shooting near buildings and designated camping and boater take-out areas.

C.5. **Issue:** Vehicle access into the Birch Creek area is not maintained and is damaging to natural and cultural resources.

Issue Description: Birch Creek Road is primitive 4-wheel-drive-recommended access. The heavy use season usually coincides with the rainy season and it and the Cow Creek Road get heavily rutted. Both roads are currently under the county transportation departments authority/responsibility. Accessing Birch Creek from the north creates impacts to the river resources due to vehicles fording the river and promotes misuse of the Morrison facilities and site.

C.6. **Issue:** What action should be taken with regard to public access on roads to the Owyhee Wild River System?

Issue Description: The 1986 Owyhee Wild River plan authorized primary motorized vehicle access points for the main Owyhee as Three Forks, Rome launch site, and Leslie Gulch. The plan noted secondary access routes (requiring private land owner permission) as Birch Creek, Bogus Creek, The Hole-in-the-Ground, and Black Rocks. The Birch Creek Road no longer crosses private land. Main concerns are over maintenance of BLM and county roads, public access over private lands, and looting and vandalism of cultural resources.

C.7. **Issue:** Should Rome have a permanent Ranger/Visitor Station and campground?

Issue Description: The current facility is not adequate for staff and effective visitor contacts. The trailers have no shade and air conditioners get over-worked. A large storage/workshop facility is needed for rafts and equipment at Rome. Non-recreation staff in Jordan Resource Area have requested to use the trailers during the winter due to the travel time from the Vale Office. The current facilities are not adequate for winter use.

C.8. **Issue:** Should Rome Launch site be a wayside rest stop?

Issue Description: There has been some interest by state highway and BLM to provide a state highway rest stop in the area of Rome. Initially, the Rome launch site was a candidate. The access is not appropriate for high traffic patterns and conflicts arise between river users and highway travelers. State Department of Transportation is responsible for highway rest stops.

C.9. **Issue:** How do we contact below Rome launches?

Issue Description: There is a problem with parties launching below Rome on private land: private land owner permission is not always requested and BLM river rangers are not able to make contacts with visitors to educate them on river safety and ethics, private land concerns, cultural resource concerns, etc.

C.10. **Issue:** Should BLM check and approve boaters for safety gear?

Issue Description: There is some local concern over the county having to pay for Search And Rescue (SAR) and that the BLM should provide more education and regulation on boater safety.

C.11. **Issue:** Should BLM provide a higher level of visitor service on the rivers by increasing BLM River Ranger staff.

Issue Description: BLM, river visitors, and private land owners have expressed a need for a higher level of visitor service both on the river and at Rome launch site. Education is key to river safety and resource protection and reduction of user/landowner conflicts.

C.12. **Issue:** How should BLM manage recreation within the Three Forks area?

Issue Description: Three Forks area receives a lot of use; boating- related and other recreation activities. Main concerns are sanitation, off-road vehicle use, garbage, and impacts to the riparian vegetation.

C.13. **Issue:** Should BLM provide facilities at Anderson Crossing?

Issue Description: Use levels have increased slightly at Anderson Crossing. Some impacts from off-road travel have occurred as well as accumulation of trash. The area provides an exceptional level of primitive type recreation opportunities.

C.14. **Issue:** How will BLM manage solid human waste along the rivers?

Issue Description: Currently, BLM requires all commercial boating parties to carry out solid human waste; BLM requests all non-commercial parties to do the same. Information on solid human waste carry-out methods has been provided both as mail-outs and by river rangers at Rome. However, since new state and federal regulations prohibit dumping of solid human waste in landfills our information is outdated and we need to develop a new and better system. Although solid human waste has not been a major problem during drought years, it is better to develop a system now before increases in use create impacts difficult to reverse.

C.15. **Issue:** Will motors be allowed on the rivers?

Issue Description: No motorized boat use exists on the West Little Owyhee or the North Fork Owyhee Rivers. The current management plan for the Main Owyhee authorized ten horsepower or less downstream motor use only; jet boats and upstream motors are prohibited. However, the Oregon State Marine Board developed their regulations after the management plan was completed and authorized jet boat use from the Owyhee Reservoir to Morcum Dam area (approximately 1 mile upstream from The-Hole-in-the-Ground). BLM feels jet boat use is inconsistent with the wild character of this river. Presently, jet boat use or other upstream motor use is minimal to none.

D. FEDERAL LAND MANAGEMENT ACTIVITIES

D.1. **Issue:** How will BLM manage livestock grazing within these river canyons?

Issue Description: At several locations along each river segment, intensive grazing (partially due to drought conditions) has caused impacts to riparian values, water quality, and outstandingly remarkable values identified in the rivers' designation (such as cultural and recreation). Areas of concern include Three Forks, "Deary Pasture", Sand Hollow, Sand Spring, Lambert Rocks, Squaw Creek (upper North Fork Owyhee), and the upper reaches of the West Little Owyhee River. A few livestock operators are pushing their livestock into the canyons for the water. Management of and control of livestock within the canyons is difficult.

D.2. **Issue:** How will BLM manage trailing of livestock through the river canyons?

Issue Description: Several areas along the river corridors have been historic livestock trailing routes. A few of these areas (Three Forks and Sand Springs) are receiving significant impacts to riparian and other river related resources due to extended stays during trailing.

D.3. **Issue:** How will BLM manage the cultural resources within the river corridors?

Issue Description: Adverse impacts to cultural sites are occurring within river canyons. Some recorded sites have been heavily potted and casual surface collection of artifacts is an ongoing problem degrading the cultural resources. Inventories of the North Fork, West Little Owyhee and middle and upper segments of the Owyhee have not been performed.

D.4. **Issue:** How will BLM manage the fish and wildlife resources within the river corridors?

Issue Description: At this time, no known impacts are occurring to wildlife within the canyons. Concern has been expressed on potential impacts to bighorn sheep and Canada geese (especially during nesting) from human induced stress. Thorough inventories have not been completed on the North Fork or West Little Owyhee. BLM works with ODFW on all aspects of wildlife and habitat management.

D.5. **Issue:** What will BLM do with the water rights and agricultural lands at Birch Creek?

Issue Description: With the acquisition of the lands at Birch Creek and Morrison Ranches, BLM acquired 2 water rights for the 2 fields on these ranches. Management of these sites must include actions consistent with requirements of sites eligible or potentially eligible for inclusion in the National Register of Historic Places.

D.6. **Issue:** Clarify aircraft use within river corridor.

Issue Description: There is some confusion of the public's ability to land aircraft within the wild river corridor. Requests for information of airstrip availability come through the BLM office. The alfalfa field at the Morrison site was developed into a landing strip by the previous land owner. The previous management plan established no airstrips on public land within the Owyhee National Wild River corridor.

D.7. **Issue:** What should be done with the structures at Three Forks (cabin and corrals)?

Issue Description: The BLM, the rancher affected, and the public have expressed

concern over what use is appropriate for these structures. The cabin may be of historic value. Current use includes livestock operations and public viewing and shelter.

D.8. **Issue:** How will State lands within river corridors be managed.

Issue Description: The BLM in Oregon has signed into a Cooperative Management Agreement (CMA) with the Oregon State Parks and Recreation Department and the Oregon State Marine Board to work together to manage those rivers or river segments that are both Federal Wild and Scenic Rivers and State Scenic Waterways. Therefore, this CMA will guide general management of the Owyhee from the Oregon-Idaho stateline to Three Forks and from Crooked Creek to Birch Creek. However, portions of the North Fork and mainstem contain state land of which the Oregon Division of State Lands (DSL) is the managing agency. Concern by DSL over management of these lands within the designated river corridors must be addressed. Cooperation in management is needed.

D.9. **Issue:** How will BLM manage Bureau of Reclamation (BR) lands within the river corridor.

Issue Description: Confusion over agency management of lands within river corridor. BR has both withdrawn lands and acquired lands within the designated wild river boundaries. The Wild and Scenic Rivers Act mandated BLM as the federal agency with management responsibilities of the Owyhee Wild River.

D.10. **Issue:** How will BLM manage Federal Energy Regulatory Commission power site withdrawals within the river corridors.

Issue Description: Conflicts exist with Federal Energy Regulatory Commission power site withdrawals within the wild river corridors. The Wild and Scenic Rivers Act mandated BLM as the federal agency with management responsibilities of the Owyhee Wild River.

D.11. **Issue:** How will BLM acquisition or exchange of private and state lands within the river corridors be used as a management tool?

Issue Description: The goal of the Wild and Scenic Rivers Act is to provide protection for the rivers within the federal system. This includes the authorization to acquire lands and easements from willing land owners to assist in that protection. Some concern exists regarding loss of revenues for the common school fund from state land. BLM is currently involved in state land exchanges which may affect the wild river corridors. The Trust for Public Land (TPL) and BLM are working together to prevent economic impacts of public land acquisitions in Malheur county.

D.12. **Issue:** How will BLM manage mining and other potentially surfacing disturbing activities within the river corridors?

Issue Description: Although there is currently no mining claims within any of the three designated river canyons, the picture jasper mine near Birch Creek can be viewed from the river and there is potential for new mining activities to occur. BLM must protect each river's outstandingly remarkable scenic values.

E. WATER QUANTITY AND QUALITY

E.1. **Issue:** How will BLM and state agencies cooperate to manage water quantity for the rivers' outstandingly remarkable values (ORVs)?

Issue Description: ORVs such as wildlife and recreation require certain water levels and water quality. The Wild and Scenic Rivers Act requires BLM to protect and enhance the ORVs that established the river as a federal designated wild river.

E.2. **Issue:** How will BLM and state agencies cooperate to manage water quality for the rivers' outstandingly remarkable values (ORVs)?

Issue Description: ORVs such as wildlife, recreation and scenery require appropriate water quality levels. The Act mandates BLM to protect the ORVs for which the rivers were designated.

IV. GOAL AND OBJECTIVES

Goal

The National Wild Owyhee River System Management Plan will provide protection and enhancement of the outstandingly remarkable and significant values of the Main Stem, North Fork, and West Little Owyhee Rivers (within the state of Oregon). These river segments shall be preserved in free-flowing condition and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

General Objectives

Provide for low-impact recreation in a manner compatible with the protection of sensitive riparian, cultural, visual, and wildlife values and visitor safety.

Provide visitor services to enhance enjoyment of the Owyhee River System while protecting the unique and sensitive resource values of the area.

Enhance visitor and land user appreciation of the important resources of these rivers.

Ensure protection and enhancement of the values which caused the rivers to be designated without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values.

Ensure Best Management Practices (BMPs) for range and grazing activities on all public lands are meeting State of Oregon approved nonpoint source water quality standards. (BMPs were developed by the Oregon Department of Environmental Quality, BLM and USFS.)

Manage the river canyons to protect significant cultural resource sites. Cooperate with the State Historic Preservation Office to protect and stabilize resources on state and private lands.

Manage the river canyons to protect the habitats for fish and wildlife species. Cooperate with ODFW in protecting and restoring habitats for fish and wildlife, with particular emphasis given to bighorn sheep, river otter, Canada geese, and raptors.

Negotiate to obtain appropriate easements, land acquisitions or land exchanges on state or private lands when necessary to protect the canyons' environment, or preserve recreation use.

Owyhee River Management Objectives

Protect and, where possible, enhance the outstandingly remarkable recreational, scenic, geologic, wildlife, and cultural values of the designated Wild and Scenic Owyhee River.

Rome to Owyhee Reservoir

Improve the protection of the prehistoric and historic cultural resources in order to retain scientific values and enhance visitor appreciation of these resources.

Birch Creek/Morrison area

1. Protect and maintain the integrity of buildings, structures, and landscape features as is consistent with federal policy and law.

2. Maintenance of historic buildings, structures, landscape, and setting will conform to the Secretary of Interior's Standards and Guidelines for Rehabilitation (Sec. 110 of the National Historic Preservation Act).

3. New facilities (such as those needed for health and safety) will be unobtrusive and compatible with the historic landscape.

4. Inventory and document the historic property and complete a property management and maintenance plan.

West Little Owyhee River Management Objective

Protect and, where possible, enhance the outstandingly remarkable recreational, scenic, wildlife, and cultural resources of the designated Wild and Scenic West Little Owyhee River.

North Fork Owyhee River Management Objective

Protect and, where possible, enhance the outstandingly remarkable recreational, scenic, and wildlife resource of the designated Wild and Scenic North Fork Owyhee River.

V. MANAGEMENT ACTIONS

The following are management actions common to all alternatives. These items are mandated by existing law or policy.

1. All public lands within the authorized boundaries of the Owyhee National Wild River System designated by the Wild and Scenic Rivers Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States (The National Wild and Scenic Rivers Act, 1968, as amended).

2. Subject to valid existing rights, the minerals in Federal lands which are part of the Owyhee National Wild River System and constitute the bed or bank or are situated within one-quarter mile of the bank of the Owyhee, West Little Owyhee and North Fork Owyhee Rivers designated wild rivers under The Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto. (The Wild and Scenic Rivers Act.)

3. As stated in the 1986 Owyhee Wild River Plan, Final, Action III.A.3.-"Exclude Mining and Land Disturbing Actions Within Designated River Corridor." All prospecting, mining operations, and other activities on mining claims within the West Little and North Fork Owyhee Wild Rivers (outside the 1/4 mile withdrawal boundary) shall be subject to such regulations as the Secretary of the Interior may prescribe to accomplish the purposes of the Wild and Scenic Rivers Act.

4. Two sections of the Owyhee River are classified as State Scenic Waterways. The main Owyhee from the Oregon-Idaho border to Three Forks (25 miles) and from Crooked Creek to Birch Creek (42 miles). The Oregon State Scenic Waterways Program promotes cooperative protection and wise use of rivers in the system by all federal, state and local agencies; individual property owners, and recreational users. BLM and the State Parks Department will coordinate management.

5. The Jordan Resource Area of the Vale District, BLM, will administer noncommercial and commercial boating use on the Owyhee River System in Oregon.

6. The adjoining BLM districts (Boise, Idaho, Elko, Nevada, Vale, Oregon) will coordinate issuing special recreation permits to outfitters that provide services across district boundaries. Only one permit will be required from companies operating in one or more BLM districts. Through a cooperative agreement between the districts, the Jordan Resource Area of the Vale District will administer commercial permits on the Owyhee River. Commercial operators must have the appropriate state licenses before obtaining a BLM permit. The cooperative agreement will be reviewed and updated every 5 years or as needed.

7. Portions of the river corridors are within BLM Wilderness Study Areas (WSAs). Federal lands within WSAs are managed under the BLM's "Interim Management Policy and Guidelines for Lands Under Wilderness Review" (IMP). Basically, the IMP provides for protection of each WSAs wilderness values. Only Congress can determine what areas may be designated as wilderness. If part or all of a Wild and Scenic River is designated as Wilderness then it shall be subject to both the Wilderness Act and the Wild and Scenic Rivers Act, and in case of conflict, the more restrictive provisions shall apply.

8. The significance of the Birch Creek Ranch as an Historic Landscape (and potential National Register site) requires BLM to protect and maintain this cultural resource until a determination has been made and proper management actions are implemented. All applicable cultural resource protection laws will be enforced.

The following recommendations are BLM's preferred actions for management of the Owyhee Wild River System.

A. ADMINISTRATIVE BOUNDARIES

A.1. Set administrative boundaries for the West Little and North fork Owyhee Rivers as shown on Maps 1A through 4B in appendix A and as described in appendix B. Maintain existing Owyhee River administrative boundaries which were designated in the 1986 Owyhee Wild River Plan.

Preliminary boundaries were established in 1989 for the North Fork and West Little Owyhee Rivers. BLM staff established the preliminary boundaries to encompass the outstandingly remarkable values which resulted in the rivers' designation. The ORVs of the North Fork are scenery, recreation and wildlife resources, while the ORVs of the West Little are scenery, recreation, wildlife, and cultural. The main stem Owyhee River administrative boundaries were set by the 1986 Owyhee Wild River Plan. No conflicts have arisen over this boundary, therefore, the Main Owyhee Wild River boundaries will remain as is. Administrative boundaries would be final through the Federal Register Notice of this plan when it's completed.

B. RECREATION USE LEVEL

B.1. Maintain current use limits set in the 1986 Owyhee plan while implementing the Limits of Acceptable Change (LAC) process to determine appropriate and acceptable resource and social conditions for all three rivers.

The existing management plan for the main Owyhee states that "a visitor use allocation system will be established when social, physical or environmental use levels approach carrying capacity." Limits on boating party size have been set for each segment of the Owyhee River (refer to the Recreation Use section of chapter II. D.) and would remain the same until the LAC process can determine otherwise. LAC is a nine step process with primary emphasis on the conditions desired in an area rather than on how much use an area can tolerate. A key to the LAC process involves determining indicators of resource and social conditions. Tied to these indicators would be quantifiable standards that collectively determine what kinds and levels of impacts are acceptable.

In summary, the process requires deciding what kind of resource and social conditions are acceptable on the Owyhee River System, then prescribing actions to protect or achieve those conditions. Through LAC, BLM would establish baseline data on such resources as vegetation (including T&E and riparian), wildlife (including T&E), cultural, recreation, and water (quality and quantity) for all three rivers to ensure proper standards are set.

If an allocation system is necessary, full public participation will be sought in developing the criteria to establish such a system.

C. RECREATION ACTIVITIES

C.1. Provide primitive, dispersed type hiking opportunities throughout the Owyhee River System.

There has been some public and BLM interest in constructing hiking trails along the North Fork from the Idaho BLM campground to Three Forks, and throughout other areas of the main Owyhee canyon. Documented use levels on hiking the Owyhee canyons are low. The Owyhee canyons offer exceptional

backcountry backpacking and hiking opportunities, but the remoteness of the area and steep, rugged terrain deter many recreationists. Construction would be very difficult and costly. Since demand is not significant enough to support this project, it has been abandoned during this planning phase. BLM would develop a registration system in cooperation with Idaho BLM to determine use patterns and use levels. BLM would determine the feasibility of mapping out a potential trail down the North Fork canyon (and other areas of the Owyhee system) for a topographic map brochure for visitors to follow. This would still allow for a primitive type recreation experience.

C.2. Maintain exceptional primitive type recreation experience along the Owyhee River System.

Some private boaters are concerned about the remoteness of the Owyhee canyonlands and the lack of potable water. The Owyhee and North Fork provide the float boater with a primitive type recreation opportunity. Self-reliance is part of the experience sought by float boaters on the Owyhee. The federal designation of these rivers requires BLM to limit development and management in order to protect wild river characteristics. BLM would not develop springs nor install water caches within the designated Owyhee Wild River System in order to maintain its exceptional primitive type recreation opportunities.

C.3. Manage Birch Creek Ranch in a manner that would provide low-impact type recreation opportunities and protects the natural and cultural values of the area.

BLM has acquired the developed properties known as the Birch Creek and Morrison (Pinnacles) Ranches. The properties have several cabins, barns, and other ranch-related facilities. The area is potentially eligible for inclusion in the National Register of Historic Places due to the historic structures and the significance of the historic landscape and ethnic associations. Interim management of the site includes a temporary caretaker, a designated camping area, a float boat take-out site, and the opportunity for other recreation activities such as hiking, fishing, nature study.

BLM would manage the Birch Creek site (upper site) as a public use area with minimal development similar to the interim management. Allow float boater take-out or put-in at this site. Provide a camping area with toilet facility. Develop an interpretive station at one of the existing structures.

Develop partnership with interested agencies and groups to rent the Morrison site (lower site) as a research station, environmental education site, science camp, etc. The area provides many opportunities for natural, cultural, recreational, wild river, and wilderness resource research activities.

BLM would provide a permanent, year-round caretaker to manage/maintain these properties and provide visitor service.

A site plan and supplemental environmental analysis would be developed and submitted to the State Historic Preservation Office for concurrence.

C.4. Restrict hunting and shooting within and around the Birch Creek and Morrison sites to provide a safe environment for the caretakers and visitors and to prevent vandalism.

Since the area is an administrative and recreation site managed by BLM, hunting and shooting limits are required by law. For safety concerns, an interim management boundary was established with ODFW to restrict shooting near buildings and designated camping and boater take-out areas. BLM would designate a permanent safety/no shooting zone and

develop supplemental rules for enforcement authority by the BLM ranger. BLM would work with ODFW to provide cooperative management and enforcement.

C.5. **Work cooperatively with Malheur County to provide safe public vehicle access into Birch Creek Ranch while protecting natural and cultural resources.**

Update the existing Cooperative Management Agreement with Malheur county Department of Transportation to include management of the Birch Creek Road and the river ford at the north end of the Morrison site. The Birch Creek Road requires some culvert work, low water crossings, and some blading in order to provide safer public access and reduce erosion problems.

BLM would work with the county to close the road on the west side of the river, north of the Morrison place approximately 2 miles before it crosses the river and enters the Morrison site. The road would be closed with a natural barrier, at the most feasible location, to prevent potential vandalism, theft and unauthorized use.

All work would be consistent with county policy and regulations and BLM's wilderness study area interim management policy.

The county would maintain Cow Creek Road from Highway 95 to the junction with Birch Creek and Coffee Pot Crater Roads. BLM would maintain Birch Creek Road on down to Birch Creek Ranch.

C.6. **Provide public vehicle access for the Owyhee River at Three Forks, Rome Launch Site, Birch Creek, and Leslie Gulch; for the West Little Owyhee River at Anderson Crossing (Star Valley Road); for the North Fork Owyhee River at Three Forks.**

Vehicle access for this wild river system would continue to be minimal to maintain the wild river character. Vehicle access within the designated corridors would be maintained as primitive-type four-wheel drive (recommended) access roads. No new access roads would be developed. Maintenance would be shared by BLM and Malheur County.

C.7. **Develop a permanent visitor and ranger station at the Rome launch site to be open to the public at least 9 months of the year and for administrative and other BLM functions the entire year. Maintain toilet facilities, picnic table and fire-rings. Develop a small campground to provide for the use that currently exists.**

The current facility is not adequate for staff and effective visitor contacts. It is not accessible to disabled visitors. The trailers have no shade and air conditioners get over-worked. A larger storage and workshop facility is needed for rafts, equipment and repair work. The picnic site receives a high level of camping use and it would be altered to provide actual campsites. A permanent facility could be used by staff throughout the year while performing work in the area. A site plan and supplemental EA would be developed.

C.8. **Work with the State Highway Department to determine an appropriate site for a highway rest stop between Burns Junction and Jordan Valley.**

There has been some interest by Oregon Department of Transportation and BLM to provide a state highway rest stop in the area between Burns Junction and Jordan Valley. Initially, the BLM Rome Launch Site was a candidate. Current highway ingress and egress to the launch site is unsafe for higher levels of use. In addition, conflict would arise between river users and the general public competing for the sites' limited facilities, especially restrooms. Therefore, it is not an adequate site and will not be given further consideration.

BLM would assist Oregon Department of transportation with the development and management of a highway rest stop between Burns Junction and Jordan Valley. ODT has the lead responsibility for providing such a facility and BLM would work with them as staffing and funding allow.

C.9. **Work with local landowners to restrict boaters from launching on private lands downstream from the Rome Launch Site. Develop signing, interpretive talks, and brochure(s) to promote education of natural, cultural and scenic values, and land owner rights along the river. Work with commercial outfitters prior to each float season discussing current issues, concerns, management strategies, etc.**

Problems have arisen with parties launching below Rome on private land: private land owner permission is not always requested and BLM river rangers are not able to make contacts with visitors to educate them on river safety and ethics, private land and cultural and natural resource concerns. BLM wants to work with local private land owners to restrict boaters from launching on private lands downstream from Rome. It is important for BLM to make initial contacts prior to parties launching to discuss proper safety gear and techniques, to encourage boaters (commercial and noncommercial) to give talks (before launching and during slack water in Rome area)educating users on safety, wildlife, cultural resource protection, geology, low impact recreation techniques, private land concerns, etc. BLM will work with outfitters to schedule a workshop before the beginning of each float season to train guides on these education topics and techniques, and discuss outfitter and BLM concerns.

C.10. **Provide more visitor service and education on safety concerns and resource values within the Owyhee system.**

BLM would provide more user education on safety issues, i.e., set up a video in the office that boaters can watch before launching on river rescues and emergency situations and protection of cultural and wildlife values. Coordinate with Idaho and Nevada sheriffs (with Owyhee River area jurisdiction) on search and rescue operations.

There is some local concern over the county having to pay for search and rescue and that BLM should provide more education and regulation on boater safety. This is a wild river and promotes a certain level of risk recreation. Oregon law requires boats of all types to carry life preservers for each person on board. BLM requires boaters to register at the launch sites. Visitors/boaters should contact river rangers prior to launching whenever possible. River rangers check for firepans, adequate life vests and other equipment as much as possible. The river staff is there to ensure that river boaters have adequate equipment and information on safety.

C.11. **Increase BLM river ranger staff to provide more visitor service and more effective management of each river's outstandingly remarkable values.**

BLM, river visitors and local land owners have expressed a need for a higher level of visitor service on the Owyhee River, at Rome Launch Site, and at access points on the other two designated rivers. Education is key to resource protection and reduction of visitor/land owner conflicts. Increase river ranger staff to provide more visitor service, facility maintenance, resource protection, allow for increased patrols to ensure safety and permit compliance, and to effectively manage all three rivers. A river ranger staff with diverse skills such as cultural or wildlife training would provide the needed resource inventorying, monitoring and protection measures.

As mentioned under management common to all alternatives, Vale District, Oregon

would update the existing cooperative management agreement with Boise District, Idaho and Elko District, Nevada to provide more effective management of the entire Owyhee River.

C.12. **Develop a primitive-type camping area at Three Forks to provide the minimum facilities necessary for public use and enjoyment and public health and safety.**

Three Forks area receives high levels of use by boaters, hunters, anglers, and many other recreationists. Primary concerns are sanitation, unauthorized off-road vehicle use, garbage, and impacts to riparian vegetation and unrecorded, but known cultural resources. BLM would perform a cultural resource inventory of the site. BLM would develop a more permanent toilet facility and construct a primitive-type camping area with minimal development. Installation of toilet(s) is consistent with the implementation of the existing Owyhee River plan. The existing bulletin board at Three Forks would be used to provide information on vehicle use areas and roads, low impact recreation techniques, and cultural and natural resources (interpretation and protection information). A site plan and supplemental EA would be developed (with SHPO review).

C.13. **Maintain the outstandingly remarkable primitive-type recreation opportunities at Anderson Crossing on the West Little Owyhee River.**

The West Little Owyhee River provides approximately 56 miles of river canyon with only one designated vehicle access point (Anderson Crossing). Although use levels have increased slightly at Anderson Crossing, monitoring does not indicate a need for facility development at this site. Projected use levels for this site would not approach projected use levels for Three Forks due to no float boat use. Patrols of the site including trash pick-up have increased since the river's designation, but are still infrequent (approximately 4 times during field season). BLM would install a bulletin board to provide information and promote appropriate user ethics (similar to the board at Three Forks). BLM would increase patrols by BLM river rangers and recreation maintenance staff to at least once per month during the field season (approximately April through October).

C.14. **Require all boaters to carry-out solid human waste. Provide disposal facility.**

During normal water years, solid human waste is a health and safety problem. "Toilet paper fields" are abundant at popular sites. This regulation would assist in eliminating the problem. Currently, BLM requires all commercial boating parties to carry-out solid human waste. This new requirement of noncommercial boaters would be phased in over a 2 year period through visitor contacts on the river and at launch and take-out sites, mail-outs, and news releases. State and federal regulations prohibit dumping solid human waste in landfills. New and better systems need to be developed for solid human waste carry-out and disposal. BLM wants to develop a system now before increases in use create impacts difficult to reverse. BLM would develop supplementary rules to provide BLM law enforcement authority of this requirement.

Users would determine appropriate carry-out system for them. BLM would provide a disposal facility at an appropriate location(s), i.e., the Rome Launch Site, Birch Creek Ranch, Leslie Gulch.

C.15. Prohibit all motor boat on the Owyhee River System (Main, West Little and North Fork Owyhee Rivers).

Make permanent the current situation of no motorized boat use on the West Little and North Fork Owyhee Rivers. The current management plan for the main Owyhee authorized ten horsepower or less downstream motor use only; jet boats and upstream motors are prohibited. However, the Oregon State Marine Board (OSMB) developed their regulations for the Owyhee after the BLM plan was completed. OSMB regulations for the Owyhee include jet boat use from the Owyhee Reservoir to Morcum Dam area (approximately 19.5 miles). Presently, jet boat use is nonexistent on the Owyhee River. Demand for such activity is minimal to none.

BLM maintains that motor boat use (especially jet boats) is inconsistent with protecting the wild character of this river. The river was designated for its outstanding scenic, wildlife, cultural and recreational values associated with wild rivers. BLM's mandate of multiple use provides for a spectrum of recreation opportunities, so there is something for everyone, but every acre cannot support all uses. The system allows for differences/preferences - the opportunity to float a wild river and enjoy great scenery and solitude. The term "wild river" signifies something that is untamed where self-reliance and primitive type recreation is appropriate.

The majority of the Owyhee canyonlands (all but approximately 10 miles of the designated river) are recommended for wilderness designation. All motorized equipment and mechanical transport would be prohibited within the wilderness areas. Only Congress can designate wilderness and authorize special language for wilderness legislation. BLM has not included special language for motorboat use on the Owyhee River in the wilderness proposal package.

BLM would request OSMB to develop regulations prohibiting jet-boat use (which is consistent with the findings of the original Owyhee Wild River Plan for the main stem) and all other motor-boat use on the Owyhee River System. BLM would request OSMB to develop and implement these regulations. BLM would develop supplementary rules for BLM enforcement authority.

D. FEDERAL LAND MANAGEMENT ACTIVITIES

D.1. Remove livestock from the river canyons where alternate sources of water can be provided above the rims.

At several locations along each river segment, intensive grazing (partially due to drought conditions) has caused impacts to cultural resources, riparian vegetation, soils, and other outstandingly remarkable values identified in the rivers' designation. The main areas of concern are Three Forks, Deary Pasture, Sand Hollow, Fletcher Trails, Sand Spring, Ryegrass Crossing, Lambert Rocks, Chalk Basin, Bogus Creek Road, Bull Creek, The-Hole-in-the-Ground, Squaw Creek (upper North Fork), and the upper reaches of the West Little Owyhee River. The control of livestock through rim gap exclusion fencing, providing alternate water source, and increase livestock monitoring would improve natural values, reduce impacts to cultural values and ease livestock management.

Livestock would be excluded from the river corridors where alternate sources of water could be provided above the rim or when livestock impacts are adversely affecting the outstandingly remarkable values of these rivers. BLM would focus on the areas mentioned above as priority livestock exclusion areas and continue to monitor each river corridor for potential livestock

impacts. Project specific EAs would be developed.

D.2. **Restrict trailing of livestock to the minimum necessary locations and for less than a day.**

Trailing would be restricted to the following areas: Three Forks, Sand Spring, Bogus Creek, Bull Creek, The-Hole-in-the-Ground, on the main Owyhee, and Spring Creek Crossing on the West Little Owyhee. Authorized trailing within the river corridors would occur within a one day (12 hour) period. All federal public land trailing use would require a permit.

D.3. **Develop, fund and implement cultural resource protection plans for all three rivers.**

Adverse impacts to cultural sites are occurring within the river canyons. Some sites have been heavily potted and illegally surface collected. Problem areas and inventories are worked on as staffing and funding allow. In 1993, BLM would begin site stabilization and cultural resource protection and interpretation work on the Lower Owyhee Canyon (below Rome) as priority since this area has been recorded. Work would also begin on inventorying the middle and upper segments of the Main Owyhee River then the West Little and North Fork Owyhee Rivers. Signs, brochures and other educational/interpretationalmethodswould be used. This work would be conducted in phases over a five year period. Visitor education and implementation of ARPA regulations would be key to protection of this resource. Monitoring and visitor education would be ongoing.

D.4. **Develop a Cooperative Management Agreement (CMA) with Oregon Department of Fish and Wildlife (ODFW) to manage the fish and wildlife and their habitat within the river corridors.**

At this time, no known impacts are occurring to wildlife within the canyons. Concerns exist over potential human induced stress on nesting Canada geese and bighorn sheep. The CMA would establish an inventory schedule for the West Little and North Fork Owyhee River corridors. BLM would work with ODFW on all aspects of fish and wildlife and habitat management. Monitoring wildlife numbers and activity will continue. BLM and ODFW would work together to provide more public education through brochures and signing.

D.5. **Maintain BLM's water rights at Birch Creek Ranch. Rehabilitate the two fields as feasible and consistent with SHPO.**

With the acquisition of the lands at Birch Creek and Morrison Ranches, BLM acquired two water rights for the two fields on these ranches. BLM would maintain the water rights consistent with applicable state laws. Rehabilitation of the Birch Creek (upper) field is necessary due to its poor condition. The Morrison (lower) field, currently is alfalfa, would be maintained as funding and staffing allow and SHPO concurs.

D.6. **Clarify aircraft use within the river corridors through this management plan, the boating guide, and other brochures and news releases as necessary.**

No aircraft may land on federal lands within the river corridors (including the formerly private airstrip at the Morrison site). The use of helicopters by commercial or noncommercial boating parties for purposes of shuttling equipment, supplies and people would be prohibited. Helicopters and motorboats may be authorized during search and rescue and other emergency operations and for wildlife management purposes. Existing private land airfields can continue to be used. BLM would develop supplementary rules for BLM enforcement authority.

D.7. **Determine cultural significance of Three Forks structures and authorize existing uses of the cabin.**

BLM would determine the cultural significance of the structures at Three Forks through inventory and SHPO review. Through review and concurrence by SHPO, BLM would authorize the existing uses of the cabin which include public use and livestock operation use.

D.8. **Develop a Cooperative Management Agreement (CMA) with the Division of State Lands to cooperatively manage those lands under its authority within the wild river corridors to protect the outstandingly remarkable values. Maintain existing CMA with Oregon State Parks and Recreation Department and Oregon State Marine Board to effectively manage the Owyhee State Scenic Waterway.**

The BLM in Oregon has signed into a CMA with Oregon State Parks and Recreation Department and Oregon State Marine Board to work together to manage those rivers or river segments that are both in the federal river system and the state scenic waterway program. Therefore, the CMA guides general management and agency coordination of the Main Owyhee River from the Oregon-Idaho border to Three Forks and from Crooked Creek to Birch Creek.

However, Oregon Division of State Lands (DSL) is not a party to this CMA and since they own approximately 4% of the lands within the main Owyhee Wild River corridor and 37% within the North Fork Owyhee Wild River corridor, they are concerned over management of those lands. BLM would develop a CMA with DSL to work towards cooperative management of the federally designated wild river corridor. The CMA would direct management of federal and state lands towards protection and enhancement of the outstandingly remarkable values of the rivers as is consistent with the Wild and Scenic Rivers Act. Management options would include land exchanges which would benefit both agencies.

D.9. **Initiate revocation of the Bureau of Reclamation (BR) withdrawals within the river corridor. Request jurisdictional transfer of BR acquired lands within the river corridor to BLM ownership. Develop a CMA between BLM and BR to allow BLM management jurisdiction over BR withdrawn and acquired lands until revocation and transfer occurs.**

Confusion exists over agency management of lands within the Owyhee River corridor. BLM is required to manage the wild river corridor, but BR has withdrawals and deeded lands within the lower 10 miles of the designated administrative boundary. In order to provide effective management of this wild river, BLM should have ownership and management of the federal lands within the river corridor. Revocation of withdrawals and transfer of deeded lands would begin in 1993. A CMA would be developed to ensure effective management until revocation and transfers are complete.

D.10. **Initiate revocation of Federal Power Site withdrawals within the Owyhee River System.**

Confusion exists over power site withdrawals and agency management within the designated river corridors. BLM is required to manage the Owyhee Wild River System, but power site withdrawals still exist even though they cannot be used due to the Wild and Scenic Rivers Act. BLM would initiate revocation of power site withdrawals to carry out the intent of the Act and ensure effective management jurisdiction.

D.11. **Negotiate to acquire priority lands important to resource protection on a willing buyer/willing seller basis.**

A goal of the Wild and Scenic Rivers Act is to provide protection for the rivers within the National Wild and Scenic River System. The Act includes authorization to acquire lands and easements from willing land owners to assist in that protection. BLM would acquire (fee title, scenic easements, and exchanges) priority lands important to resource protection within the Owyhee Wild River System. BLM would work with groups such as Trust For Public Land in such acquisitions.

BLM would not seek acquisition of developed lands. If the State Scenic Waterway Program and county planning cannot protect the Owyhee Scenic Waterway from resource damaging development, BLM would initiate action to acquire developed lands if landowners are willing sellers. However, all agencies (local, state and federal) must work together to protect these rivers.

E. WATER QUANTITY AND QUALITY

E.1. **Use ODFW's and Oregon Water Resource Department's instream flows for the Owyhee, West Little and North Fork Owyhee Wild Rivers as baseline flow requirements. Monitor the accuracy of these flow requirements in protecting the outstandingly remarkable values.**

Outstandingly remarkable values (ORVs) such as wildlife and recreation require certain water levels. The Wild and Scenic Rivers Act requires BLM to protect and enhance the ORVs that established the Owyhee River System as federally designated wild rivers. ODFW is in the process of applying to Oregon Water Resources Board for certain instream flows on all three designated rivers within the Owyhee System. These flows will provide for protection of fisheries, recreation and aesthetic values. OWRD has determined preliminary flow requirements for the Owyhee Scenic Waterway to protect recreation, fish and wildlife values. BLM would establish these instream flows developed by the state agencies as flow requirements for the Owyhee Wild River System to protect the ORVs. If monitoring indicates that these flows are not adequate, BLM would work with the state agencies to provide appropriate protection of the ORVs.

E.2. **Implement a water quality monitoring system to protect each rivers water resource and related outstandingly remarkable values.**

Moderate water quality problems have been observed on the Owyhee Wild River System by Oregon Department of Environmental Quality. BLM, Vale District, is currently working on implementing water quality testing for riparian management throughout the District. BLM would implement the water resource monitoring plan described in the monitoring section of this plan.

VI. MONITORING

Monitoring the implementation of the management plan is essential to ensure that the plan's goals and objectives are achieved. Monitoring measures:

1. The extent to which management actions have been implemented;

2. The extent to which implemented actions are achieving management objectives; and

3. The extent to which further plan adjustments are needed.

The Limits of Acceptable Change process will be used to assist in monitoring the effectiveness of this plan. The LAC process will provide monitoring measures for all resources within the river corridors. However, this process will not be fully implemented until 1994. During the interim, other monitoring programs as described below will be implemented.

The condition and trend of bighorn sheep herds would continue to be monitored by ODFW. The riparian monitoring will also be used to document changes in the quality of wildlife habitat. Specific guidelines for wildlife monitoring would be developed through the cooperative management agreement with ODFW.

The riparian zones would be monitored to document changes in the quality and quantity of riparian vegetation.

Maintaining water quantity and quality is essential to the management of the river canyons. The gage at Rome is the only water monitoring station on the Owyhee River System in Oregon. Long-term continuous recording streamflow stations should be established (dependent upon accessability) at the mouth of the West Little Owyhee River and on the North Owyhee River immediately upstream of the Middle Fork. Initial installation costs for establishing a new gaging station with all instrumentation is approximately $25,000 per station. All subsequent years would require funding at about $8,000 per station for flow data with the option for limited water quality data such as sediment, conductivity, pH, and temperature for an additional $7,000 per station annually.

BLM's primary charge is to manage, maintain, and/or improve existing habitat on federal public lands for multiple and future uses. Presently, Oregon/Washington BLM's minimum monitoring standards for riparian and stream channel areas consist of either photo points or low level aerial color infrared photography with an option for recording riparian inventory site forms. Additional monitoring with avalaible funding and staff includes line-intercept vegetation transects, stream cross-sections and profiles, macroinvertebrate sampling with water quality and quantity and fish habitat inventories where fish are known to exist. Basic water quality field sampling constituents consist of conductivity, water and air temperature, time of day, pH, sulfate, nitrate, dissolved oxygen, turbidity, and alkalinity. Other constituents may be sampled as required by monitoring needs.

This data would be used to help determine the effects on water quantity and quality of BLM and non-BLM actions within the river canyons. Decreased flows or significant changes in water quality may require more adamant protests to upstream diversions, groundwater pumping or use.

At the end of each fiscal year, the status of each management action would be documented. At a minimum the documentation would include: a list of the management actions implemented, a list of the management actions partially implemented, a list of the management actions not implemented, an analysis of the monitoring results showing the effectiveness of the management plan and problems, and recommendations for revising the plan.

VII. IMPLEMENTATION

The Jordan Resource Area River Manager would be assigned responsibility for coordinating the implementation of this plan. Inventorying, designing, constructing, and monitoring and the annual monitoring report, identifying specific actions to be accomplished by others, and determining adjustments in methodology will be assigned to pertinent staff. These assignments will be made annually, supported by the AWP, submitted to the appropriate supervisor, and become line items on the responsible individual's Performance Improvement and Position Review.

The implementation schedule and cost estimates for the proposed actions are shown in Table 8. After all actions have been implemented, overall operation, maintenance and management of the National Wild and Scenic Owyhee River System would be approximately $150,000 annually.

Table 10

ADMINISTRATIVE ACTION SUMMARY										
Administrative Action & Number	FY92		FY93		FY94		FY95		FY96	
	WM	$[1]	WM	$[1]	WM	$[1]	WM	$[1]	WM	$[1]
A. BOUNDARIES										
A.1. Set boundaries			0.50							
B. RECREATION USE LEVEL										
B.1. LAC	2.00		10.00	3.00	10.00	2.00	8.00	2.00	8.00	2.00
C. RECREATION ACTIVITIES										
C.1. Dispersed Hiking	0.25		0.25	0.5	0.25	1.00	0.25		0.25	
C.2. Potable H_2O			0.25							
C.3. Birch Ck				46.70[2]		30.10[2]				
C.4. Hunting	0.25									
C.5. Birch Ck Access Morrison Access	0.25		0.5	251.00[6] 2.00						
C.6. Access	1.50	2.00	2.00	2.00	0.25					
C.7. Rome				18.60[2]		20.40[2]		22.0		226.2
C.8. Rest Area					0.50		1.50		6.00	50.0
C.9. Launching	1.00		0.50		0.50		0.50		0.50	
C.10. Safety	4.00		4.00		4.00		4.00		4.00	
C.11. Rangers			4.00		4.00		4.00		4.00	
C.12. Three Forks			2.00		3.00		3.50		2.00	15.0
C.13. West Little	0.75		2.00	5.0	2.00	8.00	2.00	8.00	2.00	
C.14. Waste	1.00	0.30	0.25		0.25		0.25		0.25	
C.15. Jet Boats			0.50							
D. FEDERAL LAND MANAGEMENT ACTIVITIES										
D.1. Grazing			2.00	40.00	2.00	40.00	2.00	40.00	2.00	40.00
D.2. Cultural			11.50		8.25		4.25		6.25	
D.3. ODFW			0.50							
D.4. Irrigation										
D.5. Air strip			0.25							
D.6. Aviation			0.25							
D.7. Three Forks cabin			1.00							
D.8. State lands			1.00		0.50		0.50		0.50	
D.9. Revoke BOR			0.50							
D.10. Revoke FPC			5.00							
D.11. Acquisitions				365.00[3]		1000.00[4]		678.00[5]		

ADMINISTRATIVE ACTION SUMMARY										
Administrative Action & Number	FY92		FY93		FY94		FY95		FY96	
	WM	$[1]	WM	$[1]	WM	$[1]	WM	$[1]	WM	$[1]
E. WATER MANAGEMENT										
E.1. Quantity			4.00		1.00		1.00		1.00	
E.2. Quality					0.50	25.00	0.50	40.00		30.00
WM TOTALS	**11.00**		**54.75**		**37.00**		**32.25**		**36.75**	
$ TOTAL		**2,300**		**368,800**		**1,126,500**		**790,000**		**363,200**

[1] $ x 1000
[2] These totals rounded to nearest $100.00
[3] Includes 2 WM
[4] Includes 20 WM
[5] Includes 10 WM

Work Month figures for footnotes (3, 4, 5) assume some acquisitions by exchange, which require greater work months of effort. But, the dollar figures may be lower if exchanges occur.

[6] Maximum high estimate. Cost may be lower depending on materials sources, future management direction, weather, etc.

VIII. ENVIRONMENTAL ANALYSIS

A. INTRODUCTION

The Owyhee River System planning area contains approximately 50,000 acres of public land, 3,000 acres of state land, and 2700 acres of private land in Malheur County, Oregon. The area encompasses approximately 200 miles of river and surrounding canyonlands (of which 186 miles are designated as National Wild and Scenic Rivers). Also within this planning area are portions of five Wilderness Study Areas (WSAs) and the Owyhee Area of Critical Environmental Concern (ACEC). The planning area contains outstandingly remarkable recreational, scenic, geologic, wildlife, and cultural values. The management actions recommended in this plan would protect these outstandingly remarkable values (ORVs) while allowing land uses in a manner which recognizes the importance and sensitivity of the area.

B. AFFECTED ENVIRONMENT

A detailed description of the affected environment is provided in Chapter II. "Existing Situation." The environmental elements of farmland (prime/unique), floodplain, Native American religious concerns, and hazardous waste are not affected by this planning effort and will not be analyzed further.

C. MANAGEMENT ALTERNATIVES

There are three alternatives analyzed in this environmental assessment.

ALTERNATIVE A (PREFERRED)

The preferred alternative is to adopt and implement the National Wild and Scenic Owyhee River System Management Plan. Main emphasis is on protecting each river's outstandingly remarkable values. BLM would strive to provide (maintain) primitive type recreation opportunities while protecting natural and cultural values. Some facility development and road upgrade would occur to provide for health and safety.

A detailed description of the preferred management actions is provided in Chapter V.

ALTERNATIVE B (NO ACTION)

The Act requires that a management plan be developed to provide protection of the river environment especially the outstandingly remarkable values. Therefore, wild and scenic river management of the West Little and North Fork Owyhee Rivers would still occur. This alternative would mandate continuing management of the Owyhee River with the existing plan and not allowing for changes such as Birch Creek. Birch Creek would continue under the interim guidelines developed in March of 1991 until a site plan could be developed. Conflict between OSMB rules and the existing plan action on jet boat use would continue under this alternative. Issues concerning cultural resource protection, livestock and recreation uses, and management of West Little and North Fork Owyhee Wild Rivers would not be effectively addressed. The management actions for Alternative B (the no action alternative) are as follows:

A. ADMINISTRATIVE BOUNDARIES

A.1. Interim administrative boundaries for the West Little and North Fork Owyhee Wild Rivers would be made permanent through the mandate of the Wild and Scenic Rivers Act. The Main Owyhee River administrative boundaries would remain the same.

B. RECREATION USE LEVEL

B.1. Establish a visitor use allocation system when social, physical or environmental use levels approach carrying capacity as directed in the 1986 Owyhee Wild River plan.

C. RECREATION ACTIVITIES

C.1. Maintain outstanding opportunities for primitive, dispersed type hiking in the wild river canyons. No developed or constructed trail system.

C.2. Maintain primitive type recreation opportunities on the Owyhee System. As a federally designated wild river it requires minimal development and minimum level of management. No spring development and no water caches developed.

C.3. Maintain upper site (known as Birch Creek) for general public use, i.e., boater takeout, camping, fishing, hiking; maintain Morrison site for BLM meetings, workshops, and research facility. Provide year-round caretaker.

C.4. Maintain existing no shooting area boundary at Birch Creek Ranch to provide a safe environment for the caretakers and recreationists at the Birch Creek and Morrison sites. Proceed with developing BLM supplemental rules for enforcement authority of this action.

C.5. Manage Birch Creek access as primitive 4-wheel drive roads, infrequently maintained. No physical closure of Morrison Road, but discourage access through the river.

C.6. Keep designated motorized vehicle access points for the main Owyhee as Three Forks, Rome launch site, Leslie Gulch, Birch Creek, Bogus Creek, Hole-in-the-Ground, and Black Rocks. (The last three roads traverse private land and owner permission is required.) Physical maintenance is mixed between county and BLM.

C.7. Maintain the Rome trailer facility for seasonal use as office, visitor contact station, and housing for river program. Maintain year-round picnic and toilet facilities.

C.8. Maintain BLM facility at Rome as a Launch Site not a state highway rest stop.

C.9. Continue to require float boater registration at designated put-in or take-out sites. Maintain current Rome launch site location.

C.10. Maintain existing situation. No mandatory check in. Continue to coordinate with Malheur, Owyhee and Elko County Sheriffs. (River rangers check for firepans and look at life vests and equipment as much as possible, and provide information on safety. River rangers have no law enforcement authority.)

C.11. Maintain current river staff: Jordan Resource Area (JRA) of the Vale District Office employs 1 River Manager/Ranger and 2 seasonal River Rangers. River patrols require at least 2 rangers. Other duties include patrols, management and maintenance of other areas such as Three Forks, Birch Creek, and the North Fork and West Little Owyhee Rivers. Also, JRA administers the commercial recreation permits on the Owyhee River in Nevada, Idaho and Oregon.

C.12. Provide chemical toilet each season (spring through fall) at Three Forks. Maintain bulletin board to provide general recreation information. Maintain patrols and site clean-up efforts.

C.13. Although use levels at Anderson Crossing have increased slightly, monitoring does not indicate a need for facility development at this site. Patrols of the site including trash pick-up have increased to approximately four times during field season.

C.14. Maintain current BLM management of solid human waste carry-out methods. All commercial boating parties to carry out all solid human waste; BLM requests all non-

commercial parties to do the same. Information on updated solid human waste carry-out methods would be provided both as mail-outs and by river rangers at Rome consistent with state and federal regulations which prohibit dumping of human waste in landfills our information is outdated.

C.15. Manage motorboat use on the Owyhee Wild River as directed by the 1986 BLM Owyhee River plan: no jets boats or upstream motors allowed; motors of 10 horsepower permitted downstream only. No motorized boat use exists on the West Little Owyhee or the North Fork Owyhee Rivers. BLM would develop supplementary rules for enforcement of these actions.

D. FEDERAL LAND MANAGEMENT ACTIVITIES

D.1. Current authorized livestock management would continue. Livestock would continue to use the river canyons for water and forage where accessible.

D.2. Maintain current management of trailing of livestock through river canyons. No documented management coordination with Oregon Division of State Lands for trailing at Three Forks exists.

D.3. Maintain current direction recommended in 1986 Owyhee Wild River Plan. However, little to no action has occurred due to minimal funding and personnel. BLM would request funding and staff to implement cultural resource management within the Owyhee as a first priority action. Adverse impacts to cultural sites are occurring within river canyons. Some sites have been heavily potted. Inventories of the North Fork, West Little Owyhee and middle and upper segments of the Owyhee have not been performed.

D.4. BLM would continue to work with ODFW as necessary. At this time, no impacts are known to be occurring to fish and wildlife within the canyons. Inventories on the North Fork or West Little Owyhee Rivers would be implemented as funding and staff allow.

D.5. Maintain lower alfalfa field and water rights.

D.6. Maintain current management direction. Fixed-wing aircraft are classified as off-road vehicles when landing off of existing roads, ways or developed, designated air strips. The existing Owyhee River Management plan restricted motorized vehicle use within the river corridor to designated roads. Therefore, landing of fixed-wing aircraft is prohibited within the administrative boundary of the Owyhee National Wild River, except on designated roads and airstrips. Also, motorized vehicle use is restricted to existing roads and ways within all Wilderness Study Areas (main Owyhee and West Little Owyhee are WSAs). Oregon State statutes restrict landing of aircraft on public roads. Maintain no public use of airstrip at Morrison (Pinnacles) Ranch.

D.7. Trespass action has been initiated for the cabin and corrals at Three Forks. None of the existing uses (livestock operations and recreation) are currently authorized. No cultural resource evaluation has been performed on the structures/site for historic significance.

D.8. Maintain existing cooperative management agreement between BLM in Oregon, the Oregon State Parks and Recreation Department and the Oregon State Marine Board to work together to manage those rivers or river segments that are both Federal Wild and Scenic Rivers and State Scenic Waterways. Therefore, this CMA guides general management of the Owyhee from the Oregon-Idaho border to Three Forks and from Crooked Creek to Birch Creek. BLM would work with Oregon Division of State Lands to resolve conflicts and issues within the wild river corridors.

D.9. Continue to pursue revocation of BR withdrawals within the wild river corridor as directed in the 1986 Owyhee Wild River Plan.

D.10. Maintain existing management situation on Federal Power Site Withdrawals within the wild river corridors. A cooperative management agreement allows BLM to provide limited management direction on the withdrawn lands with the concurrence of the Federal Energy and Regulatory Commission.

D.11. Continue to implement current Owyhee river plan and acquire all private parcels within administrative boundary. No acquisition strategy would be established for the North Fork and West Little Owyhee rivers; acquisitions would occur as issues or conflicts arise.

E. WATER QUANTITY AND QUALITY

E.1. BLM would follow ODFW's and OWRD's lead on instream flow recommendations for the Owyhee Wild River System. ODFW has applied or is applying for instream flows on all three rivers for the protection and enhancement of fisheries and recreation and aesthetics benefits. OWRD has determine instream flow requirements for the Owyhee State Scenic Waterway to protect recreation, fish and wildlife values. BLM would not apply for water rights on any of the Owyhee Rivers on Oregon.

E.2. Continue with current management direction which includes inventorying areas within the Owyhee system that may need water quality monitoring. No specific BLM water quality management plan/system for the Owyhee exist.

ALTERNATIVE C (RECREATION FOCUS)

The main emphasis of this alternative is to manage the outstandingly remarkable values of these wild rivers and provide for recreation use. However, preserving and managing recreation use would be the main emphasis. More facility, trail and road development would occur. Removal of structures at Birch Creek and Three Forks may occur. Boater carrying capacities would be set and boater check-ins would be mandatory. The management actions for Alternative C are as follows:

A. ADMINISTRATIVE BOUNDARIES

A.1. Establish West Little and North Fork Owyhee River administrative boundaries to reduce the amount of private and state lands within the designated corridors. Exclude currently proposed side drainages that are state or privately owned.

B. RECREATION USE LEVEL

B.1. Set use limits now through professional judgement and documented use levels and impacts and allow for change when limits are not adequate. Limits would include reducing party size to 9 people and reducing starts per day to 2 (for commercial and non-commercial) on the middle segment of the Owyhee River (Three Forks to Rome).

C. RECREATION ACTIVITIES

C.1. Develop (construct) a hiking trail within the canyon (where feasible) and along rim (when necessary to avoid steep, talus slopes, sensitive resources, etc.).

C.2. Provide water caches during river float season. Develop springs for better water source.

C.3a. Remove all structures at Birch Creek (an agreement between BLM, the State Historic Preservation Office and the Advisory Council on Historic Preservation

is mandatory) and maintain as primitive boater takeout site with no improvements/facilities.

C.3b. Lease Birch Creek and Morrison to a concessioner.

C.3c. Maintain both sites (Birch Creek and Morrison) for public use. Develop upper site for high general public use area. Rent out cabins at lower site to public. Provide a museum with living history programs. Develop a self guided trail.

C.4. Provide no shooting restrictions except directly near buildings at Birch Creek and Morrison Ranches. Develop BLM supplemental rules for enforcement regulations.

C.5. Upgrade Birch Creek Road to 2-wheel drive, dual lane vehicle access. Close route north of Morrison site with fence and gate at the most feasible location to prevent vandalism, theft, and unauthorized use.

C.6. Close Bogus Creek Road. Initiate easement acquisitions for The-Hole-in-the-Ground and Black Rocks roads to provide public access to the Owyhee River. Maintain Three Forks, Rome launch site, Leslie Gulch, and Birch Creek as Owyhee River vehicle access points.

C.7. (No action was established under this alternative.)

C.8. Develop a CMA with Oregon Department of Transportation (ODT) for cooperative management of a Rome rest stop and work with ODT on for safer access at the highway junction.

C.9. Initiate exchange to acquire land just south of Crooked Creek (on willing seller basis only) for new launch site location. If exchange is completed, move existing facilities at Rome to new site.

C.10. Require mandatory check in for all boaters for safety equipment, etc. Develop BLM supplementary rules for enforcement authority.

C.11. (No action was established under this alternative.)

C.12. Develop Three Forks into a hardened site similar to Idaho BLM's campground on the North Fork. Increase patrols, visitor contacts, and trash clean-up efforts.

C.13. Develop of primitive recreation site at Anderson Crossing to include toilet facility, garbage cans, and information bulletin board.

C.14. Maintain commercial use management of carry-out of solid human waste. Require all non-commercial parties to carry out human waste. Let users determine appropriate system and disposal method for them consistent with state and federal law.

C.15. Allow 10 horsepower or less motor boat use downstream only on the Main Owyhee River below Birch Creek. Prohibit jet boat use on all three rivers.

D. FEDERAL LAND MANAGEMENT ACTIVITIES

D.1. Remove livestock from river canyon completely through fencing, water developments and/or grazing systems. Increase use supervision. Establish appropriate project maintenance and monitoring requirements.

D.2. Eliminate trailing of livestock throughout the designated river canyons.

D.3. (No action was established under this alternative.)

D.4. (No action was established under this alternative.)

D.5. Maintain lower field in alfalfa and let upper field revegetate naturally without irrigating. This may mean loosing water right on upper field.

D.6. No aircraft landings allowed on federal lands within the wild river corridors except for emergency situations. Open airstrip at the Morrison site for visitor use.

D.7a. Initiate action to remove all structures at Three Forks which includes a cultural survey and concurrence from SHPO. OR

D.7b. Maintain Three Forks cabin for public use only.

D.8. (No action was established under this alternative.)

D.9. Develop a CMA between BLM and BR establishing BLM management for all federal lands within wild river corridors.

D.10. Develop a CMA between BLM and FPC establishing BLM as land manager over all federal lands within river corridors.

D.11a. Do not acquire any more private lands along river corridors. OR

D.11b. Acquire all parcels or obtain scenic or access easements on a willing seller basis.

E. WATER QUANTITY AND QUALITY

E.1. Request/apply for federal water reserve on all 3 rivers. This is not consistent with the Secretary of the Interior's current directive.

E.2. No increased emphasis would be established on water quality management.

D. ENVIRONMENTAL CONSEQUENCES

The impacts to resources, activities, and land uses are described in detail for each alternative. Impacts may be positive or negative or there may be no impact/effect at all. The letter/number combination(s) at the end of each impact description shows the correlating action(s).

ALTERNATIVE A (PREFERRED)

Vegetation

The proposed administrative boundary encompasses all noteworthy vegetation within the rivers' environment including the special species (Category II, etc.) listed in the resources section (Chapter II.C.). Important side canyon riparian and endemic vegetation is included within the proposed boundaries. Impacts would be positive. **(A.1.)**

Shoreline vegetation can be adversely impacted by human use due to high levels in concentrated areas. The level at which human impact becomes detrimental is not known. Using the LAC process to develop criteria to monitor the well being of canyon flora would provide protection of such flora. Stress upon vegetation from human use would be one criteria in establishing an upper limit of human use. A principle concern would be the continued reproduction of desired plant species. This process would be implemented to provide a positive benefit to vegetation. **(B.2.)**

By not developing springs nor constructing water caches would provide a positive benefit to vegetation. No surface disturbance around springs would occur. Less disturbance would occur from human use of springs and water cache areas.**(C.2.)**

Maintaining both natural and introduced plants at the Birch Creek Ranch would be a high priority in order to protect the diverse wildlife habitats and maintain and

enhance the outstanding scenery. **(C.3, D.5.)**

By closing the road into the north end of the Morrison site with a natural barrier of some type would result in more secure protection of the vegetative resources (both native and nonnative) of the Morrison Ranch. The significance of the nonnative vegetation lies in the potential for it to be a contributing element for a site on the National Register of Historic Places.**(C.5.)**

Loss of some vegetation would occur from the development activities at Rome, Three Forks, and a wayside rest stop. Hardening these sites would benefit vegetation by controlling use and preventing widespread impacts. Also, some landscaping would occur thus enhancing vegetation at some rather barren sites.**(C.7.,8.,9.,12.)**

Road machinery work would cause disturbance to road-side vegetation. However, the improved road condition would lessen the instances of vehicles having to drive off the road to avoid mud holes, thereby lessening adverse affects. **(C.5.,6.)**

Vegetation would benefit by increasing education efforts and visitor service (increased ranger staff) through teaching visitors low impact techniques and interpreting vegetation especially sensitive species. **(C.9.,10.,11.,13.)**

Establishing carry-out methods for solid human waste eliminates the need to dig latrines, thus protecting vegetation at popular campsites. **(C.14.)**

Livestock management under this alternative would greatly benefit vegetation within the canyon, especially riparian. The benefit would parallel the extent to which the livestock are excluded. It is most likely that alternative watering methods and rim gap fencing can be accomplished on the majority of livestock-impacted sites along these rivers. Impacts around troughs or other watering devices above the rim would occur, but these impacts would be considerably less than the impacts to vegetation presently occurring within the canyons. Waters above the rim would provide better distribution of available and authorized forage. **(D.1.)**

One day trailing requirements would enhance soil and vegetation and associated resources such as wildlife by eliminating the degraded areas where livestock camped for long periods before trailing on. **(D.2.)**

By producing alfalfa or native hay at the Morrison field and rehabilitating the Birch Creek field vegetative values and diversity would be greatly enhanced. **(D.5.)**

Eliminating use of the airstrip at Morrison would reduce impacts to vegetation by preventing off-road vehicle use in this area. **(D.6.)**

Through a cooperative management agreement with DSL, more coordinated livestock management should improve vegetation. **(D.7.)**

Starting with existing data and proposed instream flows from Oregon Water Resources Department and ODFW allows a baseline for effective management of river values. Monitoring these instream flow needs and managing for them would provide added data to be able to make changes, if necessary, in instream flow requirements. Vegetation would receive a positive benefit from the protective management emphasis of this action. **(E.1.)**

Determining and managing for minimum instream flows would provide a tool for protecting vegetation within the river corridors. **(D.1.)**

Water quality monitoring would assist in protective management of riparian vegetation. **(D.2.)**

Fish & Wildlife

Protection and enhancement of habitat (see vegetation above) produces benefits to the wildlife resource. Since the proposed boundaries would benefit vegetation/ habitat values, it therefore benefits fish and wildlife values. **(A.1.)**

Using the LAC process to develop quantifiable standards to monitor the well being of canyon fauna provides a positive benefit in terms of protection of the fauna. **(B.1.)**

Minor impacts to wildlife may occur due to dispersed hiking use. Raptors would receive more impact (stress) when hiking occurs on the rim above raptor nests than down inside canyons. **(C.1.)**

Maintaining the habitat diversity at Birch Creek Ranch would be a positive benefit to wildlife. Enhancing the vegetative diversity through establishing native species on degraded areas would benefit the wildlife resource. Minor impacts may occur to fish and wildlife with increased human use at Birch Creek Ranch. However, management would focus on educating the visitors and protecting fish and wildlife. **(C.3., D.5.)**

Temporary minimal impacts would occur to wildlife during any road machinery work to maintain or improve road access to the rivers. Impacts may consist of stress to animals and mortality of rodents. **(C.5., 6.)**

Closing the road into the north end of the Morrison site with a natural barrier would result in more secure protection of the area's fish and wildlife resource. Potential stream pollution and disturbance from vehicle use through the river would be eliminated. Poaching opportunities would also be reduced thus better protecting wildlife. Reducing vehicle encroachment and possibly reducing human induced stress on the habitat and species would be positive benefits. **(C.5.)**

Loss of some habitat would occur from the development activities at Rome, Three Forks, and a wayside rest stop. Hardening these sites would provide an overall benefit to habitat by controlling use and preventing widespread impacts. Also, some landscaping would occur thus enhancing habitat at some rather barren sites. **(C.7., 8., 9., 12.)**

Fish and wildlife would benefit by increasing education efforts and visitor service (increased ranger staff) through teaching visitors low impact techniques and interpreting fish and wildlife and their habitat. **(C.10., 11.)**

More controlled management of solid human waste carry-out and disposal would provide a positive benefit to fish and wildlife. The potential for soil contamination and decreases in water quality would be significantly reduced. **(C.14.)**

Prohibiting jet boats on the Owyhee Wild River System would benefit nesting geese. Power boat wakes disrupt nests and break down banks. The noise and wakes of power boats may stress nesting geese. **(C.15.)**

Removing livestock when feasible water sources are available would benefit fish and wildlife through habitat improvement. The degree of benefit would parallel the extent of livestock exclusion. **(D.1.)**

Controlling livestock trailing through the river canyons would benefit fish and wildlife habitat. Less impacts to shoreline vegetation and sedimentation would occur. **(D.2.)**

Fish and wildlife would benefit through improved coordination with ODFW resulting in more effective habitat and species management. **(D.4.)**

Wildlife would benefit from maintaining the alfalfa field and rehabilitating the Birch

Creek field through improved habitat and forage. **(D.5.)**

Prohibiting non-governmental aircraft use within the river canyons would help reduce the existing poaching problem. **(D.6.)**

A CMA between BLM and DSL may provide positive impacts to fish and wildlife habitat through more effective management. **(D.8.)**

Fish and wildlife could benefit from the withdrawal revocation process due to BLM's ability to provide more effective management of fish and wildlife habitat than Bureau of Reclamation and Federal Energy Regulatory Commission could in these areas. **(D.9., 10.)**

Acquisition of private land would eliminate construction and development of these lands thus protecting fish and wildlife habitat. **(D.11.)**

Determining and managing for minimum instream flows would provide a tool for protecting the river corridors fish and wildlife resources. Where wildlife is an ORV it would be crucial to maintain minimum flows. **(E.1.)**

Establishing a water quality monitoring plan would provide added protection for fish and wildlife. Potential decreases in water quality would be determined allowing BLM to establish management actions to reverse the situation. **(E.2.)**

Cultural

The proposed boundaries includes many cultural sites, many of which are not recorded. Cultural resources are an outstandingly remarkable value (ORV) of the Main and West Little Owyhee Rivers and the Wild and Scenic River Act mandates protection of ORVs. **(A.1.)**

The LAC process would benefit cultural resources through setting monitoring standards to protect against human and livestock surface impacts. **(B.1.)**

Maintaining primitive, dispersed hiking opportunities (limiting use) limits the potential for increases in surface collection of artifacts and potting and trampling of cultural sites. **(C.1.)**

Springs usually contain cultural sites. Cultural resources would benefit through no surface disturbance from spring development nor water cache construction. **(C.2.)**

Management of the Birch Creek Ranch area would be consistent with the NHPA and ARPA. Protecting and interpreting this cultural resource would provide a significant benefit for science, potentially the National Register of Historic Places, and visitor education. **(C.3.)**

Eliminating hunting in the vicinity of the Birch Creek Ranch area would restrict opportunities for casual collecting of and vandalism to cultural resources. **(C.4.)**

Closing the road at the north end of the Morrison site would prevent easy access to cultural resources in this area. The closure would prevent unsupervised vehicle visits to the Morrison site. **(C.5.)**

Any new surface disturbance, such as development at Rome, Three Forks, Birch Creek, and a wayside rest-stop, would require a Class III cultural resource inventory. Significant site, if any, would be protected through mitigation by avoidance or appropriate data collection. **(C.7, 8., 9., 12.)**

Increased educational efforts through brochures, bulletin boards, signs and visitor service (increased ranger staff) would have a positive effect on cultural resources. Generally, cultural resources would continue to be somewhat impacted by recreationists. Effects include camping on archeological sites and casual collecting by recreationists who find artifacts on the

surface. Education would be key to reducing these type of impacts. **(C.10., 11.)**

Removal of livestock as feasible would reduce livestock impacts on archeological properties. This action would significantly benefit cultural resources. **(D.1.)**

Control of livestock trailing would help protect cultural sites along the rivers. Less trampling of sites would occur. Authorized trailing corridors would be inventoried and recorded sites avoided or mitigated. **(D.2.)**

Management direction on the Three Forks cabin would provide management necessary to inventory and protect this potential cultural resource. **(D.7.)**

The CMA with DSL would provide more effective management of all cultural resources within the river boundaries. **(D.8.)**

Cultural resources would benefit from more effective management through the revocation of BR and FERC withdrawals to BLM. **(D.9., 10.)**

Acquisition of private lands within the wild river boundaries would provide a mechanism for inventorying, protecting and interpreting potential cultural resources on private lands. Significant cultural sites may exist on private lands within the river corridors. **(D.11.)**

Scenery

The proposed administrative boundaries for the West Little and North Fork Owyhee Rivers encompass all the important viewsheds of these river environments. Since scenic resource values of these three rivers have been determined to be outstandingly remarkable, incorporating all the important river related scenic resources within the administrative boundaries provides protection through the Wild and Scenic River Act. **(A.1.)**

Using the LAC process on the Owyhee Wild River System would benefit scenic resources. The LAC process establishes protective measures for resource and social conditions. Impacts are reduced or limited including impacts to the areas scenic resource. **(B.1.)**

Providing primitive, dispersed type hiking opportunities instead of developing permanent trails and foot bridges helps to maintain the outstandingly remarkable scenic value of these rivers. Although trails can be constructed with reduced impacts to resources, a visual intrusion would still occur. Dispersed type hiking must be managed to prevent social trails, erosion and vegetation impacts which would degrade scenic values. (These concerns would be incorporate into the LAC process.) **(C.1.)**

Signs showing hunting and shooting restrictions may impact scenic quality at Birch Creek as visitors pass by these small signs. **(C.4.)**

Road work on the Birch Creek Road would not be seen from the river and most areas within the corridor due to its location within the drainage. Hikers on a nearby rim or ridge may see portions of the road work, but visual impacts would be temporary as the hikers more on and the surface disturbance becomes shielded from view. Closing the ford at the Morrison place would prevent vehicle impacts that may degrade the scenic quality of this area. **(C.5.)**

Increased education efforts should assist in decreasing surface impacts thus reducing potential impacts to the scenic resources of these rivers. **(C.9.,10.,11.)**

A primitive type camping area which includes a toilet facility would reduce the current visual impacts of toilet paper fields and trash accumulation. **(C.12.)**

Scenic quality would be improved through management of solid human waste carry-

out and disposal. Latrine digging and toilet paper fields along the river corridors would be eliminated or at least significantly reduced. **(C.14.)**

Management of livestock under this alternative would improve visual quality in the long term as vegetation condition improves , especially in riparian areas, and in the short term as livestock feces are reduced. **(D.1.,2.)**

Management of cultural resources under this alternative would lessen impacts to visual quality by reducing potting of caves and surface digging. **(D.3.)**

Improving the vegetative condition of the fields at Birch Creek and Morrison would improve visual quality. **(D.5.)**

Cooperative management with DSL for protection of the outstandingly remarkable values within the river corridors would benefit the scenic resources which is an ORV for each river. **(D.8.)**

Acquiring private and state lands in order to protect the rivers' resources would benefit scenic values by preventing potential development that may impair visual quality within the area. **(D.11.)**

Managing water quality to prevent decreased quality or degradation would benefit the scenic resource of these rivers. Improved water quality means improved visual quality. **(E.2.)**

Geology

Increased education efforts through brochures, signs, and visitor service would provide interpretation of the geological resource of these river corridors. Impacts from collecting and vandalism would be reduced through education efforts. **(C.10., 11.)**

Soil

Soils can be adversely impacted by humans due to high use levels in concentrated areas. The level at which human impact becomes detrimental is not known. Using the LAC process to develop criteria to monitor soil conditions would allow for protective measures to be implemented prior to degradation. **(B.1.)**

Dispersed hiking use may create some erosion problems within the canyon. The level of erosion would parallel the level of human use which is expected, based upon previous use, to be low. **(C.1.)**

Development activities at sites such as Birch Creek, Rome, Three Forks, and a wayside rest stop would disturb soils in localized areas. Within these development activities are soil stabilization measures to eliminate or reduce impacts presently occurring. **(C.7., 8., 12.)**

The proposed road work on Birch Creek Road would reduce or eliminate current soil erosion problems. Soils would be disturbed in areas along the road during stabilization and construction activities. The overall long term benefit would be positive. **(C.5.)**

Closing the route north of the Morrison site to vehicle traffic would eliminate soil erosion at the river crossing and potential disturbance to soils at the Morrison site from uncontrolled off road vehicle travel. **(C.5.)**

Potential impacts to soils along the river corridor at Anderson Crossing may occur with increases in off road vehicle travel. Providing information and patrolling the site more frequently would assist in preventing potential impacts. **(C.13.)**

Managing solid human waste along the river corridors would prevent soil contamination and erosion problems through eliminating deposition of solid

human waste and digging of latrines. (C.14.)

Designating specific trailing crossings and removing livestock from the canyons where feasible or necessary would reduce soil erosion problems caused by livestock grazing. Soils would stabilize providing opportunities for plant growth. (D.1., 2.)

Implementing rehabilitation measures on the Birch Creek field would be a benefit to soils. Seeding with a native vegetation cover would assist in soil stabilization. Maintaining the lower field in alfalfa would eliminate weed infestation and soil erosion problems. (D.5.)

Controlling aircraft landings within the river corridors would protect soils from disturbance. (D.6.)

Determining and managing for minimum instream flow needs would provide a tool for monitoring soils along the river corridors. (E.1.)

Developing water quality monitoring would provide protective measures for soils by preventing or reducing potential soil contamination. (E.2.)

Air

Temporary dust impacts to air quality may occur during facility and road development or maintenance activities. This impact is negligible. (C.3., 5., 6., 7., 8., 12.,)

Water

The proposed action boundary would be a positive benefit to water resources by incorporating important canyonlands and side drainages. The proposed boundaries protect the water resource from impoundment and diversion. (A.1.)

Use of the LAC process would be a benefit to water resources by providing protective standards for monitoring water quality. This process would assist in managing for short term impacts at areas of high concentration such as campsites where increases in compaction, erosion, human waste, and trash can play a role in decreasing water quality. (B.1.)

Short-term impacts to the water resource at Birch Creek Ranch could be expected from increased use in the form of trash and erosion potential from launching and landing boats, and trampling of streamside vegetation. The full-time caretaker would provide the needed management (visitor contacts and supervision) to prevent these potential impacts. (C.3.)

Providing minimal upgrade of Birch Creek Road within the current alignment to a level requiring less frequent maintenance would decrease erosional factors while providing increased water quality. Negligible short-term sedimentation impacts would still exist from road usage and maintenance. (C.5.)

Closing off access through the river corridor at the Morrison site would eliminate impacts to the stream system. Water quality would benefit. (C.5.)

Developing a permanent facility at Rome may provide for increased use thus requiring more water from the well system. (C.7.)

Since livestock grazing is considered to be one of the contributing elements impacting water quality within the Owyhee Basin, removing livestock from the canyons while providing alternative water above the rim would be a positive benefit to the river canyons' water resource. (D.1., 2.,)

The BLM Hydrologist would need to evaluate each land acquisition before an impact assessment could be made. (D.11.)

The proposed action identifies the critical need for state and federal cooperation to determine and establish minimum flow

requirements for the river corridors. Managing for and maintaining minimum flow requirements would be crucial for protecting ORVs. **(E.1.)**

Increasing BLM's current effort on water quality monitoring would benefit the water resource of this wild river system. **(E.2.)**

Grazing

Increases in human use may increase recreation/livestock conflicts. **(B.1.)**

As paths become worn-in such as a North Fork primitive trail, livestock would be drawn to it thus creating a livestock management problem. This could be reduced or eliminated by proper gate/turnstile systems at the entrance and exit. Also, increased livestock monitoring in this area would help to alleviate this problem. **(C.1.)**

Increased education efforts and recreation use supervision would provide users with more information on livestock operations and may help to lessen conflicts. **(C.9., 10., 11.)**

Removing livestock from the canyon would create several impacts to grazing management. According to the planning unit agreement, the boundary of the allotments affected is the middle of the river. However, the land use plan grazing environmental impact statement shows most of the Owyhee canyon bottomlands as inaccessible or unallocated to livestock. The MFP (land use plan) recommends removing livestock from the Owyhee canyon where alternate sources of water can be provided above the rim. It would be difficult in some areas to provide adequate water systems on the plateaus without a high cost to both the permittee and BLM. Options may include changing grazing systems to ones with riparian improvement objectives, costly water hauling (increasing road use thus increasing road maintenance needs), fences, barriers, and winterized pipeline and water trough systems. **(D.1.)**

Removing livestock from the canyons would reduce stress on the animals from travelling over difficult terrain. This would provide a positive benefit to livestock operators by eliminating livestock weight loss from steep canyon travel. It would also ease livestock operators' management of their stock by eliminating difficult round-ups in the canyons. **(D.1.)**

Enforcing the livestock trailing stipulations would require more use supervision by livestock operators and BLM range staff. Positive benefits would include more effective grazing management and enforceable use supervision. **(D.2.)**

Authorizing use of the Three forks cabin (consistent with SHPO) would improve grazing management through documenting and stipulating appropriate use. **(D.7.)**

Development of a CMA with DSL would provide more effective grazing management within the wild river corridors. This would benefit BLM, DSL and the livestock operators by reducing or eliminating conflicts over use, use supervision, and trailing and trespass. **(D.8.)**

Recreation

The proposed boundaries would provide protective management of the outstanding scenery and other natural resources within these river canyons. This allows BLM to provide outstanding opportunities for primitive types of recreation. **(A.1.)**

Use of the LAC process in determining desired resource and social conditions would help protect the river's natural qualities and provide outstanding primitive recreation opportunities. However, the potential for use limits or restrictions to protect natural and cultural values would reduce recreationists' opportunities to use these river canyons. **(B.1.)**

No developed trails, water caches, nor spring developments maintains the primitive recreation opportunities for which the river was designated. **(C.1., 2.)**

The proposed management option for the Birch Creek Ranch provides a unique opportunity to recreationists. The diversity of recreation activities at this site would be a positive benefit to recreation management in the river corridor. Limiting general public use of the lower facility reduces the recreational potential of the area, but provides for spin-off benefits in education and natural and cultural resource protection. **(C.3.)**

Hunting restrictions at the Birch Creek Ranch reduces hunting opportunities in this area. However, safety outweighs loss of recreation activity. **(C.4.)**

Improving Birch Creek Road access would provide safer, reasonable public vehicle access. **(C.5.)**

Positive benefits would be gained through development of a permanent visitor and ranger station at Rome. More visitor services would be provided. Visitor contacts could be made year-round to provide important education information on the area. **(C.7., 10., 11.)**

A rest stop along Highway 95 would provide needed services to the traveling public and reduce minor impacts and conflicts occurring at Rome. **(C.8.)**

Providing more education and interpretation to visitors and working with local landowners around Rome would enhance the recreation experience of the river corridors and reduce conflicts with visitors and landowners. **(C.9., 10., 11.)**

Recreation at Three Forks would be enhanced through minimal, primitive type facility development. The toilet and camping sites would reduce the build-up of trash, solid human waste and rock fire-rings. Conflicts between types of recreation visitors would be reduced by these management options. **(C.12.)**

Prohibiting motor boat use on the river system would limit commercial outfitters ability to use sweep boats for commercial trips. **(C.15.)**

Many of these management actions would require visitors to be more sensitive to natural and cultural resources. Freedom would be limited by actions such as solid human waste management, motorboat use prohibitions, possible use limits, and others. However, the main objective is to provide outstanding primitive recreation opportunities while protecting the natural and cultural values of these river canyons. **(C.1., 14., 15.)**

Livestock removal where feasible and trailing controls would enhance recreation in the localized areas currently receiving impacts from livestock. Conflicts between livestock grazing and recreation would be reduced. **(D.1., 2.)**

Not allowing public use of the airstrip at the Morrison site would prevent recreation opportunities in this area of the canyon. However, this action enhances the primitive recreation activities and opportunities for solitude. **(D.6.)**

Acquisition of important resource lands may enhance primitive recreation opportunities. **(D.11.)**

Managing instream flow requirements and protecting water quality to maintain outstanding primitive recreation opportunities would provide protection of this outstandingly remarkable recreation value. **(E.1., 2.)**

<u>WSAs</u>

Management would provide for protection of wilderness values (naturalness, outstanding opportunities for solitude or

primitive recreation, and special features).

Recreation related development would be outside the WSAs. Some livestock-related projects (fencing and water development) may occur within WSAs, but impacts would not be allowed to be impairing. Overall benefits must be positive to wilderness values. Project specific environmental assessments would be completed, with SHPO review, prior to construction.

Use of the Limits of Acceptable Change process (LAC) would be a positive benefit to wilderness management. Wilderness management plans, required when an area is designated wilderness, would incorporate the LAC process as a requirement. **(B.1.)**

Prohibiting all motorboat use would be consistent with and enhance wilderness management. **(C.15.)**

ACEC

Management would provide for protection of the river environment for which the ACEC was designated. This river plan would provide management direction in lieu of an ACEC management plan.

Agriculture

No impacts

Minerals

All lands within one-quarter mile of the mean high water land on both sides of the rivers have been withdrawn from mineral entry. No mining can take place within this area due to the classification of these rivers as "wild" under the National Wild and Scenic Rivers Act. Mining activities outside of the one-quarter mile boundary would be regulated under applicable mining laws and policies.

Energy

Rome launch site is located within a proposed utility corridor. Expansion of the facility may impact the location of the proposed utility corridor. **(C.7.)**

Acquiring private land within the river corridor could hinder a utility corridor designation by closing a window area. The Utility Industry would prefer to work with private land owners. No acquisition is proposed within the nondesignated, Rome Valley, section. **(D.11.)**

Withdrawals

The Wild and Scenic Rivers Act prohibits power and water development on existing withdrawn lands within the river boundaries. No new water power withdrawals would be allowed.

The proposed action requires revocation of all withdrawals within each river corridor. Since these lands cannot be used for their withdrawn use (energy and water developments) revocation of the withdrawals to BLM would provide a positive benefit to all agencies involved. Bureau of Reclamation and Federal Energy Regulatory Commission would not be encumbered with management of lands that no longer provide the intent of the original withdrawal. BLM would be able to more effectively manage the river corridors because of the more contiguous land patterns. **(D.9., 10.)**

Minimum flow needs to protect ORV's and acquisition of state water rights would impact future hydro-potential. **(E.1.)**

Land Acquisition

Wild and Scenic River boundary designations assist in establishing higher real estate appraisal values. **(A.1.)**

Through or instead of the DSL CMA, BLM may want to acquire scenic easements on DSL lands. **(D.8.)**

Negotiated purchases, exchanges, land gifts, and scenic easements with private and state land owners would provide valuable tools for preserving the primitive environment of the river corridors. **(D.11.)**

Land Tenure Adjustment

State land exchanges are ongoing within the Owyhee River in an effort to "clean-up" land management jurisdictions. Exchanges could be done to benefit both BLM and the State of Oregon on all river segments.

ALTERNATIVE B (NO ACTION)

Vegetation

Impacts and benefits of administrative boundary designation would be the same as under the proposed action. **(A.1.)**

Although this alternative recognizes a need to eventually establish use levels and limits, it does not account for conditions where a limit on the number of people may not provide the needed protection. Due to drought conditions and low use levels minimal impacts are occurring. During seasons of normal water levels the middle and lower sections of the Owyhee River receive trampling of vegetation, soil compaction and social trails at popular campsites. The middle section with its small number of campsites and small campsite capacity may receive significant impacts during the first normal water year before management can react. Impacts from social trails may also occur within the West Little and North Fork Owyhee River Canyons. **(B.1., C.1.)**

Maintaining both natural and introduced vegetation at the Birch Creek Ranch would be a priority in order to protect diverse wildlife habitats and maintain the outstanding scenery. However, it is important to maintain the alfalfa field at the Morrison site due to its importance in stabilizing the plant communities to avoid encroachment and dominance of weed species. Encroachment of weed species has already occurred on the upper field. **(C.3., D.5.)**

Birch Creek Road receives high use in the spring when road conditions are usually poor. Impacts to vegetation occur when vehicles drive off roads to miss mud holes or ruts and when they slide off roads due to slick conditions. **(C.5., 6.)**

Uncontrolled vehicle access from the north through the river and into the Morrison site can cause extreme degradation of vegetation. Vandalism could result in loss

of trees, shrubbery and herbaceous vegetation that all have the potential to play a part in the significance of this site as eligible for the National Register of Historic Places. (C.5.)

Minor impacts are occurring to vegetation from dispersed camping and general recreation use at Three Forks. Although drought conditions have led to lower use levels of river boaters, general recreation use at Three Forks is increasing. Impacts to vegetation are occurring from trash, human waste, and vehicle travel off existing routes. Vandalism of the chemical toilet can cause leakage of human waste thus negatively impacting vegetation. (C.12.)

Little effect on vegetation from present use levels at Anderson Crossing has been noted. Although, increased vehicle and human use could adversely impact willows and shrubs along the river, thus disrupting the riparian environment. (C.13.)

Significant impacts to vegetation from livestock grazing at concentrated sites would continue. Certain areas (such as Sand Springs) are experiencing no plant growth due to livestock grazing, in other areas the riparian vegetation condition remains constant or static, not improving. (D.1.)

Current methods of trailing livestock through the river canyons impact soil, vegetation and dependent resources such as wildlife. Livestock remain too long creating significant soil and vegetation disturbance in concentrated areas of the canyons. (D.2.)

Failure to manage for instream flow needs may not provide adequate levels of protection for the vegetative resources of the rivers. Although vegetation is not an ORV, it relates directly to wildlife habitat and adds to scenic quality and should be protected. (E.1.)

Moderate water quality problems could continue and expand to severe problems. Plant growth would probably be reduced.

Fish & Wildlife

Impacts and benefits of the administrative boundary designations would be the same as under the proposed action. (A.1.)

Waiting for changes and impacts to occur before setting use limits would not provide enough protection of fish and wildlife values. Carrying capacity levels were not established, therefore human induced impacts to fish and wildlife habitat and, potentially, species would become the signal that carrying capacity is too high for protection of fish and wildlife values. (B.1.)

Raptors are sensitive to activity above their nests so hiking on the rim, whether on a developed trail or not, may cause stress to raptors. (C.1.)

Minimal maintenance of fields and vegetation at Birch Creek Ranch would have some impacts on wildlife due to potential degradation of wildlife habitat. The alfalfa field, not irrigated in 1991 due to low maintenance funding, is heavily used by wintering mule deer. (C.3., D.5.)

Eventually, the road into Birch Creek Ranch would degrade to the point of major resource damage to the creek and surrounding area. Wildlife habitat would be impacted from this erosion. (C.5.)

Uncontrolled access into the Morrison site from the north may cause extreme degradation of vegetation and related wildlife habitat. Also, such access may contribute to poaching. (C.5.)

By not incorporating the hunting and shooting restrictions into permanent federal and state regulations would reduce the ability of law enforcement personnel to

protect wildlife and educate the public. **(C.4.)**

Trash accumulation and trampled vegetation are impacting fish and wildlife habitat at Three Forks due to uncontrolled concentrated use. **(C.12.)**

There has been no documented effect on wildlife from current use at Anderson Crossing. Although, increases in uncontrolled vehicle and human use could negatively impact fish and wildlife habitat in this area. **(C.13.)**

Without a legal solid human waste carry out and disposal system, solid human waste would increase along the river and outside the corridor when not properly disposed. Dependent upon the level of human use, wildlife habitat could be significantly impacted. **(C.14.)**

Jet boats may cause impacts to fish and wildlife. Impacts include stress from the noise and speed. During nesting season, jet boats may cause stress to Canada geese and other waterfowl along the rivers. Power boat wakes disrupt nests, break down banks and stir up silt. Speed-related wakes in the narrow Owyhee canyons can create significant disturbances. **(C.15.)**

Significant impacts to wildlife habitat from livestock grazing at concentrated sites would continue. Nonpoint source pollution from livestock grazing would continue to impact water quality, fisheries and aquatic habitat. **(D.1., 2.)**

Failure to manage minimum instream flow needs may not provide adequate levels of protection for the important fish and wildlife resources of these rivers. **(E.1.)**

Current management of water quality is not adequate. Oregon DEQ reports these three rivers as having moderate nonpoint source problems affecting water quality, fisheries and aquatic habitat. **(E.2.)**

Cultural

Impacts from the administrative boundaries would be the same as under the preferred alternative. **(A.1.)**

Although this alternative recognizes a need to eventually establish use limits, it would not account for conditions where a limit on the number of people may not provide the needed protection. Cultural resources would continue to sustain minor impact by recreationists. Effects include camping on archeological sites and casual collecting by recreationists who find artifacts on the surface. **(B.1.)**

Management of the Birch Creek Ranch would be consistent with the NHPA and ARPA. **(C.3.)**

Significant historical and archeological properties may be subject to vandalism and casual collecting if hunting and shooting limits cannot be enforced. **(C.4.)**

Looting and vandalism of archeological sites would continue especially at Potters Cave along the Bogus Creek Road with increased use of the river access roads. **(C.5., 6.)**

Significant historical and archeological properties may be subject to vandalism and looting if access from the north into the Morrison site is not controlled. **(C.5.)**

No facility development and limited management at Three Forks or Anderson Crossing would provide increased impacts to cultural resources parallel to increased use by recreationists. Impacts would include casual collecting, site degradation through camping and trampling, and vandalism. The bulletin board at Three Forks provides a way of educating users to protect cultural resources. **(C.12., 13.)**

Current grazing practices are damaging several important archeological sites along the Owyhee River. In at least one area, gap fences are down and cattle roam freely

on the bench impacting the archeological site at this location. Due to the potential for significant cultural resources along all three rivers and the site specific livestock use areas, the potential for damage to cultural resources is high. **(D.1.)**

Damage to historical and archeological resources would continue without a specific cultural resource protection plan for these rivers. As funding and personnel allow, and as directed by the 1986 Owyhee Wild River management plan, a cultural resource management plan would be developed. **(D.3.)**

Allowing the water rights to lapse and invasion of weed species on these fields is inconsistent with the ranches' potential eligibility as an historic landscape. Such action would be an adverse affect and would require a three-way agreement between the BLM, the State Historic Preservation Office, and the Advisory Council on Historic Preservation before the action could be undertaken. **(E.1.)**

Scenery

Environmental consequences of the administrative boundaries would be the same as described under the preferred alternative. **(A.1.)**

Management of carrying capacity under this alternative may allow impacts to visual quality while a use allocation system is being fully implemented. Potential impacts to vegetation, as described above under this alternative, would reduce visual quality. Also, overcrowding at popular campsites and at rapids reduces visual quality within this primitive wild river setting. **(B.1.)**

Maintaining primitive, dispersed type hiking opportunities maintains the outstandingly remarkable recreation resource of these river corridors. The potential for social trails from lack of visitor information and education may be high under this alternative which could reduce visual quality. **(C.1.)**

Signs showing hunting and shooting restrictions may impact scenic quality as visitors pass by, but impacts would be significantly minimal and temporary. **(C.4.)**

Continued erosion of the Birch Creek Road would eventually produce visual impacts from soil displacement, cutting and loss of vegetation. Access through the river near the Morrison site may cause surface and vegetative impacts that reduce visual quality. **(C.5.)**

The chemical toilet at Three Forks is a bright color and stands out as a small visual intrusion. **(C.12.)**

Latrine digging and toilet paper fields would continue which would reduce visual quality within the river corridors. With increased use may come decreased water quality from solid human waste thus reducing visual quality. **(C.14.)**

Management of livestock under this alternative would continue to negatively impact visual quality. Impacts would include areas of denuded vegetation, campsites littered with cow pies, and increased fecal coliform and sedimentation decreasing water quality. **(D.1.,2.)**

Potted and vandalized cultural sites create surface disturbing visual impacts. These impacts would continue under this alternative. **(D.3.)**

Aircraft landings currently occurring on public lands within the river corridors create surfacing disturbing visual impacts. **(D.6.)**

Visual impacts may occur to state and federal lands if coordinated management, specifically livestock grazing, does not occur within the river corridors. **(D.8.)**

Cooperating with state agencies for management of instream flows would help maintain the scenic value of these rivers. **(E.1.)**

Water quality management under this alternative would potentially lead to reduced water quality thus reduced visual quality. **(E.2.)**

Geology

No impacts.

Soil

Soils can be adversely impacted by human use due to high levels of use in concentrated areas. Although use limits would eventually be established and set, soils may receive degradation prior to implementation of this management action. It would not allow for protective measures on soil conditions where limiting the number of people is not enough. A "carrying capacity" to avoid impacts to soils has not been established. **(B.1.)**

Maintaining current management at Birch Creek Ranch would potentially provide for increased use which would create minor short-term impacts such as compaction and erosion from launching and landing boats and from trampling streamside vegetation. In some areas, uncontrolled, dispersed use can create more impacts to soils than hardening a site and controlling use. Potential impacts from chemical toilet leakage through vandalism may occur. **(C.3.)**

Minor short-term impacts would occur from continual road usage and maintenance. Erosion would continue at Potter's Cave caused by easy access for looters and vandals. **(C.5., 6.)**

Erosion problems are increasing as use increases on the Birch Creek Road and maintenance remains minimal. Adverse impacts to soils would occur. **(C.5.)**

Impacts to soils along the river would continue with uncontrolled vehicle access fording the river and entering the Morrison site. This soil erosion in turn affects water quality. **(C.5.)**

Unstable soils would continue to erode at Rome without appropriate development measures and landscaping. Erosion would continue around the trailers, toilets, boat ramp, and parking/compound areas. **(C.7.)**

Minor impacts to soils would continue at Three Forks from dispersed but concentrated recreation use. With increases in use levels would come increases in impacts. Chemical toilet leakage may occur from vandalism potentially causing soil contamination. **(C.12.)**

Low use levels at Anderson Crossing would maintain minimal to no impacts at this site. Increases in use, especially inappropriate use such as off road vehicle travel would create increases in impacts to soil. This action would not provide education efforts to prevent inappropriate use. **(C.13.)**

The potential for continued usage of outdated methods of solid human waste carry out would create impacts at land fills off site from the river. Increases in use brings increases in human waste and contamination of soils, if that waste is not properly carried-out and properly disposed. **(C.14.)**

By maintaining current livestock management, impacts to soils would continue and potentially increase. Compaction and erosion occurs at concentrated use sites creating impacts to water quality, vegetative growth and aesthetics. **(D.1., 2.)**

Allowing the Birch Creek water rights to lapse and the fields to deteriorate at Birch

Creek Ranch would promote soil erosion because the fields are currently too degraded to naturally revegetate with desirable native, erosion reducing plants. **(D.5.)**

Soil disturbance and contamination would continue at the Three Forks cabin from uncontrolled use of this cow camp (a non-containerized toilet was constructed). **(D.7.)**

Air

No impacts.

Water

Preliminary boundaries on the West Little and North Fork Owyhee Rivers would not provide as much management protection of the rivers' water resource as final, designated boundaries. This action is inconsistent with the Act. **(A.1.)**

Although this alternative recognizes a need to eventually establish use limits, it does not account for conditions where a limit on the number of people may not provide the needed protection. Due to drought conditions and low use levels the only impacts that are occurring are minor ones on the lower Owyhee. Impacts occur in areas of concentration (camp sites, stream channel bars, overlooks, etc.) as compacted or eroded micro-sites, increased human waste and trash and minor decreases in water quality. **(B.1.)**

Short-term impacts could be expected from increased use in the form of waste, trash, and erosion potential from launching and landing boats and the trampling of streamside vegetation at Birch Creek Ranch. **(C.3.)**

Short-term impacts would occur in the form of increased sediments from continual road usage and maintenance. **(C.6.)**

Sediment and erosion problems are increasing as use of the Birch Creek Road increases. Significant impacts to the water resource of the Owyhee would occur from erosion due to higher levels of use. **(C.5.)**

Uncontrolled vehicle access from the north through the river and into the Morrison site brings short-term impacts to water quality in the form of sediment, oil and gas leakage, etc. **(C.5.)**

Potential adverse impacts in the form of sediments, increase litter, increased human waste and more eroded and compacted sites may occur from uncontrolled use at Three Forks as use level increase. Leakage from the chemical toilet would be a high probability due to the vandalism potential (the toilet had numerous rifle blasts through it this season, however, they were all above the vault.) **(C.12.)**

Potential short-term impacts to the water resource may occur at Anderson Crossing from increased human use. Impacts would be from vehicle use through and along the river, as well as increased levels of litter, improperly disposed of solid human waste, and soil compaction and erosion. **(C.13.)**

Impacts from uncontrolled/unmanaged solid human waste disposal would increase with increased use levels along the river corridors degrading water quality and presenting health risks. **(C.14.)**

Any motor use would present the possibility of minor pollution impacts to river water quality. **(C.15.)**

Maintaining existing livestock management would keep impacts to water quality at present levels with riparian conditions remaining constant or static at the sites receiving high use. It provides potential for decreases in water quality due to high concentrations of livestock grazing in small areas of the river canyons. **(D.1., 2.)**

If water rights at Birch Creek Ranch are not exercised within a five year period, by

State water law, the BLM would no longer hold valid water rights at this site. Potential impacts may occur if these fields become barren soil subject to erosion, creating sedimentation problems within the river. **(D.5.)**

A BLM Hydrologist would need to evaluate each land acquisition on the Owyhee River before making an impact assessment. Not managing for land acquisitions along the West Little or North Fork Owyhee Rivers eliminates the potential for improved management to occur along these river corridors, limiting the BLM's management objectives. **(D.11.)**

Not determining and managing for minimum instream flow needs would be contrary to effective water resource management of these wild and scenic rivers. Water flows are key to each river's outstandingly remarkable values. This action would prevent protective management of the ORVs. **(E.1.)**

Staffing and funding do not provide a high priority for management of water quality on the Owyhee Wild River System. **(E.2.)**

Grazing

Impacts to BLM's grazing management program would continue. Use supervision would be heavily impacted due to the need for increased monitoring. Increases in trespass cases may occur. **(D.1., 2.)**

Ranchers would continue to have difficulty in retrieving their cattle from the steep river corridors. Other impacts include livestock weight loss and stray livestock. **(D.1.)**

Conflicts between ranchers and recreationists would probably continue. **(D.1., 2.)**

Positive benefits in the lower stretches of the main Owyhee would continue. Current grazing systems designed to improve riparian conditions are meeting that objective. **(D.1.)**

Recreation

Recreation use limits would eventually be set through this carrying capacity action and would reduce visitor use opportunities. This action would allow existing impacts to continue and could potentially degrade qualities of primitive recreation activities. **(B.1.)**

Current management guidelines for the Birch Creek Ranch would continue thus maintaining current recreation opportunities. Recreation opportunities at the lower site would be lost. **(C.3.)**

Denial of access by landowners along designated access routes prevents visitor use of the rivers. Access concerns and conflicts would continue. **(C.6.)**

Current hunting restrictions at the Birch Creek Ranch would continue to limit use. **(C.4.)**

No increases in visitor services such as an improved Rome Launch Site, a new rest stop, a primitive recreation site at Three Forks, bulletin boards, and brochures would limit recreation opportunities in these river corridors. Impacts to natural and cultural resources and primitive type recreation opportunities would continue without appropriate facilities and educational materials. **(C.7., 8., 9., 10., 11., 12., 13.)**

Impacts and conflicts from current livestock grazing practices would continue to affect recreation activities. **(D.1., 2.)**

Impacts to outstanding water-based recreation values would occur by not managing for instream flow requirements. **(E.1.)**

WSAs

Any increase in impacts may have the potential of impairing the WSAs suitability for wilderness designation. For example if levels of human and livestock impacts increase without control measures then naturalness, outstanding opportunities for solitude or primitive types of recreation and special features of the WSAs may be adversely impacted. **(B.1., D.1., 2.)**

Not determining and managing for minimum instream flows would impact the wilderness resources of these rivers. **(E.1.)**

Decreases in water quality would impact the areas' wilderness qualities. **(E.2.)**

ACEC

Many of the no action options would not protect the river resource for which the ACEC was established. ACEC designation requires BLM to provide protective management.

Agriculture

No impacts.

Minerals

All lands within one-quarter mile of the mean high water line on both sides of the rivers have been withdrawn from mineral entry. No new mining can take place within this area due to the classification of these rivers as "wild" under the National Wild and Scenic Rivers Act.

Energy

No impacts.

Withdrawals

The Wild and Scenic Rivers Act prohibits power and water development on existing withdrawn lands within the river boundaries (preliminary and designated). No new withdrawals will be allowed under this Act.

Land Acquisition

Continuing with the Owyhee River acquisition plan would provide protective measures for the Owyhee. Resource-sensitive parcels along the West Little and North Fork Owyhee Rivers would not have priority protection. **(D.11.)**

Land Tenure Adjustment

State land exchanges are ongoing on the Owyhee River in an effort to "clean up" land management jurisdictions. No new state land exchanges would be implemented through this planning effort reducing the potential for more effective land management through contiguous management jurisdiction. **(D.8.)**

ALTERNATIVE C (RECREATION FOCUS)

Vegetation

Restricting boundaries to a minimum distance from the river would fail to afford legal protection to unique plants such as Packard's sagebrush (which only occur on protected ledges of the canyon walls) and other endemic plants. Small tributary canyons provide excellent habitat for this and other endemic plants. **(A.1.)**

Existing knowledge on the resiliency of the vegetation within these river corridors is not yet available to facilitate establishing meaningful human use limits. **(B.1.)**

Developing a hiking trail system through the canyons would provide a negative impact to vegetation. In addition to disturbing and destroying vegetation during construction of the trail, the degree of negative impact would be dependant on the level of human use. Impacts to the sensitive endemic plants found along canyon walls may also occur. **(C.1.)**

Developing springs and constructing water caches would disturb vegetation in these areas. Increased use in these areas would also disturb vegetation through trampling and soil compaction. **(C.2.)**

Since several management options are lumped into this alternative for management at the Birch Creek Ranch, differing types and levels of impacts would occur.

Disturbance and destruction of vegetation would occur during removal of all the structures and abandoning the sites. Weed species would invade and predominate on sites disturbed for a long time. Trees would eventually die and plant diversity would be greatly reduced. **(C.3.a.)**

The well-being of vegetation would vary with the efforts of the concessionaire. It is likely that a loss would occur due to the lack of ownership and vested interest. It is highly likely that a concessionaire would have to increase use to make it a profitable business thus potentially increasing impacts to native vegetation from higher levels of concentrated human use. **(C.3.b.)**

If its developed into a high public use area the effects on vegetation would depend on the manner and degree of maintenance and use supervision. Increased use in this concentrated area would provide the potential for increased vandalism and degradation of vegetation. **(C.3.c.)**

Upgrading Birch Creek Road to 2-wheel drive, dual lane access roads would significantly impact vegetation. Re-routing would be required which would disturb new areas of significant size. Several Federal Category 2 plants have been identified along the Birch Creek Road. Disturbance of these habitats is highly undesirable. **(C.5.)**

Closing access crossing the river and entering the Morrison site with a fence and gate would correct the potential problem which threatens vegetation along the river and at the site. Minor impacts would occur to vegetation during installation of the fence/gate barrier. However, the long-term benefit would be positive. **(C.5.)**

To enforce the Bogus Creek Road closure, a physical barrier would be installed that would undoubtedly create minor impacts to vegetation. Negotiating for easement access on The-Hole-in-the-Ground and Black Rocks Roads would provide for increased access thus the potential for increased use and increase impacts to roadside vegetation. **(C.6.)**

Any type of development such as turning the Rome Launch site into a highway rest stop, changing the location of the Rome Launch site, providing water caches, developing springs, or developing a primitive recreation site at Anderson Crossing would disturb new areas thus negatively impacting vegetation in these areas. Benefits do not outweigh negative impacts. **(C.2., 8., 9., 13.)**

Removing existing facilities at Three Forks and providing no controls at this high use area would significantly impact vegetation over time. Scattered patterns of concentrated use would continue as well as toilet paper fields, improperly disposed of human waste, and cross-country travel. As use continues to increase so would impacts to vegetation. **(C.12.)**

Management of solid human waste under this alternative would lessen impacts to vegetation from latrine digging and soil contamination. Not managing for disposal of solid human waste may create on-site and off-site impacts to vegetation through illegal dumping. **(C.14.)**

Prohibiting jet boats would prevent breakdown of banks from jet boat wakes thus preventing potential disturbance to riparian vegetation. **(C.15.)**

Removing livestock from the canyons completely, would eliminate impacts to vegetation from livestock grazing. Vegetation would be enhanced, and in some sites, enhancement would have to be assisted by human means, i.e., plantings, rehabilitation. **(D.1., 2.)**

Without providing human intervention in management of the upper field at the Birch Creek site weed species would continue to increase due to their abundance and the lack of native plants from past cultivation. **(D.5.)**

Allowing public use of the landing strip at the Morrison site would increase human use thus potentially increasing vandalism and disturbance of vegetation. **(D.6.)**

Fish & Wildlife

Restricting boundaries would not protect critical habitat thus reducing management protection of fish and wildlife. Canyon walls and associated tributaries are critical habitat for raptors. Fish within the rivers are dependent on healthy streamside vegetation and important side streams. Bighorn sheep not only frequent the river canyons but also the various benches throughout the canyon complex. Therefore this alternative would not include sufficient habitat to maintain complete environments for important fish and wildlife species. **(A.1.)**

Data on the resiliency of numerous fish and wildlife species within the canyon ecosystems is not yet available to assist in establishing meaningful human use limits. Impacts to habitat and species may occur before carrying capacities (not effectively defined) are met. **(B.1.)**

Developing a hiking trail throughout the canyons would create a negative effect on all wildlife species. The degree of this effect would depend on the amount of human disturbance from construction and subsequent use. **(C.1.)**

Spring development may degrade wetland sites and thus have an adverse impact on vegetation and dependent wildlife. **(C.2.)**

Impacts under the Birch Creek management options for this alternative include: **(C.3.)**

Removing all structures and not maintaining the area would allow for tree and vegetation loss from lack of irrigation. Plant diversity would be greatly reduced with a resultant loss of wildlife habitat and associated wildlife. Although this is non-native vegetation, it has

been maintain for many, many years providing increases in wildlife diversity in the rive corridor. (a.)

The well being of wildlife and habitats would vary with the efforts of the concessionaire. It is likely that a loss would occur due to the lack of ownership and vested interest. Increases in use necessary to make a profitable business would likely bring increased impacts to wildlife habitat. (b.)

Effects on habitats and associated wildlife by developing the area into a high public use facility would depend on the manner and degree of maintenance and use supervision. More generalized public use would potentially cause impacts to wildlife such as habitat degradation, stress, dispersement, and poaching. (c.)

By upgrading Birch Creek Road to 2-wheel drive, dual lane road would impact wildlife. Habitat would be lost from construction and realignment work and increased public use would cause stress to wildlife and provide for increases in vandalism and poaching of wildlife. (C.5.)

Acquiring deeded land down river from Rome and developing a new launch site would impact wildlife in the area. Impacts include loss of habitat. (C.9.)

Providing no facilities at Three Forks would create minor adverse impacts on wildlife and habitat from the scattered pattern of use throughout the area. (C.12.)

Fish and wildlife habitat values would be enhanced through removing livestock from the river canyons completely. (D.1., 2.)

Allowing the Birch Creek field to revegetate naturally would not provide effective rehabilitation. Weed species would continue to invade due to their abundance and the lack of native species. Wildlife habitat values would greatly diminish. (D.5.)

Opening the airstrip for public use would greatly increase the potential for wildlife impacts from poaching. (D.6.)

Federal water reserves on instream flow requirements would provide for federal protection of fisheries and other wildlife within the river canyons. (E.1.)

If water quality management is not increased, the moderate nonpoint source problems may degrade to severe. (E.2.)

Cultural

Resource and social data and cultural inventories are not adequate to set use limits on these river corridors to protect cultural resources. Cultural resources would continue to sustain minor impacts by recreationists. Effects include camping on archaeological sites and casual collecting of surface artifacts. (B.1.)

Any hiking trail would require a Class III cultural resource inventory to identify sites. Trail construction impacts to significant sites would be mitigated by avoidance or data retrieval. Sites in the vicinity of the trail are likely to be impacted by casual collecting and, possibly, trampling. (C.1.)

Springs often have important cultural sites in their vicinity. Any development of springs would require inventory and mitigation. (C.2.)

The different management options for the Birch Creek Ranch would create varying degrees of impact to cultural resources. (C.3.)

Removal of the structures would require HABS/HAER documentation of the structures

that contribute to the property's eligibility and a multi-step determination of adverse effect. No alteration could occur until a three party agreement between BLM, State Historic Preservation Office and the Advisory Council on Historic Preservation has been signed. Properties significant to the Euro-American settlement of southeast Oregon would be lost. **(C.3a.)**

A concessionaire would be required to maintain the historic structures and landscape. Lack of ownership and increased use, needed for profitable business, may allow for potential impacts such as vandalism and degradation. **(C.3b.)**

Developing the area into a high public use site would have the potential to degrade this significant cultural site. Use supervision would have to increase and education efforts would help to reduce problems. **(C.3c.)**

Closing the route north of the Morrison site with a gate would provide some protection to cultural resource values. However, the determined vandal and looter would not be deterred by a gate. **(C.5.)**

Use of The-Hole-in-the-Ground and Black Rocks Roads as access routes into the Owyhee River would continue to impact cultural resources. Significant cultural resources at The-Hole-in-the-Ground would be subject to looting, vandalism, potting, surface collection, and surface disturbance with easy vehicle access. **(C.6)**

Any road work outside of the existing disturbed area or facility development such as a wayside rest at Rome, a new launch site downstream of Rome, water caches, or at Anderson Crossing would require a Class III cultural resource inventory. If sites are found they would be mitigated by avoidance or data recovery. **C.2., 8., 9., 13.)**

Complete livestock removal (grazing and trailing) would have a positive effect on the cultural resource values within the river corridors. This action would prevent further impacts to archaeological sites from livestock. Livestock trampling of artifacts and site degradation would be eliminated. **(D.1., 2.)**

Not maintaining the Birch Creek field and potentially allowing it to degrade due to the current weed infestation problem would impact the historic values of the area. **(D.5.)**

Opening the Morrison airstrip to public use would increase opportunities for vandalism of cultural sites. **(D.6.)**

Removing the structures at Three Forks would require inventory and mitigation. Impacts would include loss of a potentially significant historic feature and the potential for education/interpretation of the site. **(D.7.a.)**

Maintaining the Three Forks cabin for public use would require increase use supervision to assist in protecting the site. Interpretation could be used to educate visitors on this historic resource value. The potential for vandalism is higher with the increased use. **(D.7.b.)**

Scenery

Reducing the administrative boundaries of the West Little and North Fork Owyhee River, eliminating some side drainages, would potentially lead to surfacing disturbing activities within the rivers' viewshed. Therefore, under this alternative, the outstandingly remarkable scenic value of these 2 rivers would not be fully protected. **(A.1.)**

Use limits set on the middle section of the Owyhee River may provide added

protection of scenic values if reductions in numbers reduce surface disturbance. **(B.1.)**

Developing a permanent trail system with bridges would produce a visual intrusion on these wild rivers. Scenic value would be reduced. **(C.1.)**

Spring development and water caches may provide temporary visual impacts as boaters and hikers pass by these developments. Adverse visual impacts would depend on the frequency of such developments. Mitigation could prevent adverse impacts. **(C.2.)**

If cultural management allows for the removal of structures at Birch Creek and Morrison, wild river scenic value would improve in the long term, but be reduced in the short term from surface disturbance. **(C.3a.)**

High levels of human use at Birch Creek and Morrison may lead to reduced visual quality from surface disturbance, vegetation loss, and vandalism. **(C.3c.)**

Development of the Birch Creek Road would increase human intrusion of surface disturbing actions thus reducing visual quality within the river's viewshed. A widened, hardened surface road would be seen from more areas than the current road. **(C.5.)**

The scenic quality of the Three Forks area would be impacted by developing a hardened-site campground. Reduced visual quality of the wild river environment would be the result. **(C.12.)**

Scenic quality would be improved through management of solid human waste. Latrine digging and toilet paper fields along the river corridors would be eliminated or significantly reduced. However, without a facility for disposal of solid human waste, illegal dumping would probably occur at take-outs and off-site reducing visual quality. **(C.14.)**

Management of livestock under this alternative would improve visual quality throughout the river corridors in the long term as vegetative condition improves especially in riparian areas and in the short term as livestock feces are reduced. **(D.1.,2.)**

The Birch Creek field cannot adequately revegetate naturally. Erosion and weed infestation all ready reduce visual quality. Impacts would continue. **(D.5.)**

Temporary reductions in visual quality would occur as aircraft land and take-off from the airstrip at the Morrison place. **(D.6.)**

Removing structures at Three Forks would improve visual quality of the wild river environment in the long term, but in the short term, surface impacts would reduce visual quality. **(D.7a.)**

Potential development that would impair visual quality within the river corridors may occur if an acquisition program for protection of ORVs is not implemented. **(D.11.)**

Management of water quality under this alternative may lead to decreases in water quality thus reducing visual quality. **(E.2.)**

Geology

No impacts

Soil

Boundary reductions would prevent protection of important soil resources along private and state lands within the river canyons. **(A.1.)**

Soils can be adversely impacted by high levels of human use in concentrated areas. Carrying capacity limits without effective data would not provide adequate management to protect soils. **(B.1.)**

Any development activities or structure removal activities would disturb soils in localized areas and create potential for erosion. (C.3.)

Significant road upgrade would reduce soil impacts by significantly stabilizing the road and reducing maintenance requirements. Closing the route north of the Morrison site with a locked gate would assist in reducing impacts to soils from vehicle travel. However, if an effective location cannot be used then off-road vehicle travel may increase due to determined motorists driving around gate. (C.5.)

If easements are obtained on The-Hole-in-the-Ground and Black Rocks Roads, vehicle use would undoubtedly increase, thus increasing soil compaction and erosion problems now occurring along these infrequently maintained routes. Closing Bogus Creek Road would prevent soil compaction and loss due to vehicle use, but may increase erosion impacts from abandonment of the road. (C.6.)

Managing solid human waste along the river corridors would prevent soil contamination and erosion problems and reduce soil disturbance from digging latrines for disposal of solid human waste. (C.14.)

Completely removing livestock from the river canyon (including elimination of trailing) would be a positive benefit to soils. Highly disturbed areas of concentrated use would be allowed to rehabilitate. Impacts to soils from livestock grazing and trailing would be eliminated. (D.1., 2.)

Allowing the Birch Creek field to revegetate naturally would cause impacts to soil through erosion. The field is too infested with weed species and does not have enough native plants to recover. (D.5.)

Opening the Morrison site airstrip for public use would increase the potential for soil compaction and erosion problems. (D.6.)

Air

Minimal impacts may occur from jet boat use and increased vehicle use due to higher public use levels from more facility development. Impacts would include increases in dust and fuel exhaust. (B.1.; C.3., 5., 6., 8., 9., 13., 15.)

Water

Reducing the boundaries of the North Fork and West Little Owyhee Rivers would not benefit the water resources as well as does the proposed action. (A.1.)

Setting use limits on one stretch of the Owyhee River with limited data may not provide adequate protection of the rivers' environment. (B.1.)

Developing springs or providing water caches would require the BLM to test, sign and certify these sites as safe for drinking. This would be a major commitment of time and funds for what is suppose to be wild river management. (C.2.)

Water resource impacts from Birch Creek Ranch management options: (C.3.)

During removal of structures increases in sediment loading would impact the Owyhee River. Site degradation and erosion would continue to add sediments to the river. (C.3.a.)

Increase use from concessionaire management would potentially bring increases in micro-site degradation. Water quality would decrease from human waste and trash accumulation. (b.)

Developing the site into a high public use area would allow for

increases in water quality degradation and eroded and compacted micro-sites. (c.)

Installing a locked gate on the road north of the Morrison site would eliminate most of the impacts to the stream system. (C.5.)

Significant upgrade of the Birch Creek Road would provide the least impact to water resources over the long term if the road is developed and maintained properly. This is due to the reduced maintenance requirements from upgrading. (C.5.)

Developing Rome into a rest stop would increase existing minor impacts, but impacts would not be significant. (C.8.)

Developing a new launch facility downstream of Rome would increase impacts such as sediment loading and turbidity in minor amounts to the river. (C.9.)

Development and increases in use at Anderson Crossing would allow for increases in sediments and turbidity and decreases in water quality in the small stream channel of the West Little Owyhee River. (C.13.)

Any increase in management of solid human waste would provide increased protection to water quality over the No Action alternative. (C.14.)

Riparian vegetation and water quality would improve from exclusion of livestock. (D.1., 2.)

The BLM would have to relinquish the water right on the Birch Creek field. Erosion from unstable soils and weed infestation would increase sediments in the river. (D.5.)

Not acquiring lands within the river corridors may not allow potential improved management to occur, limiting the BLM's management objectives. (D.11.)

Wild Horses

Removing livestock from the river canyons would require fencing which could cause the horses to concentrate and restrict movement to water sources. Sand Springs is the area of concern for wild horses. Fencing off the river canyon in this area may restrict horse migration routes and cause scars or fatal wounds if horses run into these fences. (D.1.)

Grazing

A hiking trail would probably increase livestock accessibility to the river corridors. This could lead to overuse of riparian areas and significant problems to grazing management. This could be mitigated through use of gate/turnstile systems at the end and beginning of the trails. (C.1.)

Completely removing livestock from the river canyons (grazing and trailing) could create several impacts to the current grazing systems being implemented according to the land use plan: (D.1., 2.)

(1) Allotment boundaries are the middle of the rivers and would have to be changed, thus eliminating portions of pastures.
(2) Entire pastures may be eliminated if rim gap fencing cannot prevent livestock grazing within canyons. This could cause reductions in AUMs.
(3) The ability to move livestock across the river between allotments would be eliminated. Permittees may have to transport livestock by truck over many miles of rough roads.

Impacts to livestock operations could be significant.

Removal of the Three Forks structures or management of the structures for recreation only would cause impact to a grazing operation. The permittee would

have to pack portable camping facilities to a new site with the potential of disturbing soil and vegetation at this new site. **(D.7.a., b.)**

Recreation

Reducing boundaries on the West Little and North Fork Owyhee Rivers would reduce protective management on the important scenic and other natural resources that enhance the recreation resource of these rivers. Outstandingly remarkable recreation values would be lost. **(A.1.)**

Arbitrary use limits would restrict each river's recreation potential by limiting use that may not be necessary. Current data, especially on the West Little and North Fork Owyhee Rivers, is not adequate to set effective use limits. **(B.1.)**

Developing a hiking trail would increase the types of recreation opportunities available in the river corridors. It would enhance use for those with physical limitations. A constructed trail would also reduce the primitiveness of the areas recreation potential. **(C.1.)**

Impacts to the recreation resource from Birch Creek Ranch management options include: **(C.3.)**

Loss of important recreation opportunities from removal of all structures in this area. Important interpretation messages of significant historic resources would be lost. Reductions in wildlife habitat diversity would eventually occur, limiting wildlife viewing opportunities. The scenic historic landscape would be lost for viewing opportunities. **(C.3a.)**

Management of the facility by a concessionaire would provide for increases in visitor use. Facilities would be available for rent by the general public. Impacts from conflicts between visitors performing different recreation activities may occur. Float-boating visitors floating through the area may receive impacts on their solitude and wild river experience. **(C.3b.)**

Development of the area into a high use facility would provide for more visitor use opportunities. Conflicts may arise between visitors engaging in primitive type recreation and those of more general recreation activities. **(C.3c.)**

Significantly upgrading an access route provides opportunities for more visitors. Opportunities for primitive types of recreation are reduced while developed recreation is enhanced. **(C.5.)**

Closing an access route reduces recreation opportunities for the general recreation public while enhancing backcountry, primitive type recreation experiences. **(C.6.)**

Developing the Rome site into a rest stop would provide needed services to the traveling public, but it would also create conflicts between river users and the traveling public in this small facility until a new launch site could be developed. **(C.8.)**

Three Forks would continue to receive minor resource impacts which would accumulate and reduce the scenic quality and outstanding primitive type recreation resource of the area. **(C.12.)**

Limitations and regulations would place restrictions on visitors' freedom.

Completely removing livestock from the river canyons would enhance the recreation values of the rivers. Scenic values in the localized impacted areas would be restored. **(D.1., 2.)**

Opening the airstrip at the Morrison site would increase opportunities for recreation. However, this increased use would reduce opportunities for solitude and primitive types of recreation. **(D.6.)**

Removing the structures at Three Forks would eliminate opportunities for interpretation of the area's history. Use of the cabin for shelter would also be lost. **(D.7.a.)**

Maintaining the cabin at Three Forks for public use would enhance the recreation resource in this area. The rancher's loss of this facility to public use may increase conflicts between livestock operators and backcountry recreationists. **(D.7.b.)**

Not acquiring private or state lands within the river corridors may eliminate protection of important resource values. Important recreation opportunities may be lost. **(D.11.)**

Although inconsistent with current DOI policy, federal water reserves would provide protection measures for water-based recreation activities. **(E.1.)**

Continuing nonpoint source problems may lead to decreases in water quality affecting water-based recreation. **(E.2.)**

WSAs

Through development and increases in use comes the potential for impacts to wilderness values. Outstanding opportunities for solitude and primitive types of recreation may be limited.

Constructing a hiking trail would impact the naturalness of the WSAs the trail travel through. The use and impacts would be concentrated on the trail instead of creating dispersed trailing throughout the WSAs. **(C.1.)**

Upgrading the Birch Creek Road to 2-wheel drive, dual lane road would disturb soil and vegetation and degrade the areas naturalness. **(C.5.)**

Any development such as springs, water caches, or facilities at Anderson Crossing would have to meet IMP requirements. Naturalness would receive minor on-site impacts from this development. **(C.2, 12.)**

Removing livestock from the river canyon completely would enhance the naturalness of those areas receiving impacts. Fences would create "imprints of man" on the wilderness values. The installation of fences to exclude livestock must be consistent with BLM's IMP for areas under wilderness review. **(D.1., 2.)**

Acquiring all private parcels in priority order would provide for better manageability of WSAs and potential designated wilderness areas. **(D.11.)**

ACEC

This alternative allows for more development and higher use levels and may not provide needed special management required by the ACEC designation.

Agriculture

No impacts.

Minerals

All lands within one-quarter mile of the mean high water line on both sides of the rivers have been withdrawn from mineral entry. No new mining can take place within this area due to the classification of these rivers as wild under the National Wild and Scenic Rivers Act.

Energy

No impacts

Withdrawals

The National Wild and Scenic Rivers Act prohibits power and water development on existing withdrawn lands within the river boundaries (preliminary and designated). No new withdrawals will be allowed under this Act.

Developing cooperative management agreements (CMA) with Bureau of Reclamation and Federal Power Commission would allow for better management jurisdiction of the wild river corridors where withdrawals exist. The Act gives other agencies with withdrawn lands within designated corridors the authorization to turn over their jurisdiction of the withdrawn lands to the managing agency to provide for better resource management. However, a CMA would not provide effective management like total revocation. **(D.9., 10.)**

Land Acquisition

Reducing the West Little and North Fork Owyhee River boundaries would reduce land acquisition needs and costs would be kept lower. **(A.1.)**

Development of a hiking trail system would require negotiation of either land purchases or easements across private and state lands. **(C.1.)**

Easements would be required if spring development or water caches are on private or state lands. **(C.2.)**

Acquisitions and easements would be required for new launch site facility. **(C.9.)**

Land Tenure Adjustment

State land exchanges are ongoing on the Owyhee River in an effort to "clean-up" land management jurisdictions.

E. CUMULATIVE IMPACTS

Implementation of the proposed action is not expected to result in significant cumulative impacts to any resource base. It is expected to reverse the accumulation of impacts from improper grazing management, and reduce degradation of cultural resources.

F. MITIGATING MEASURES OF THE PROPOSED ACTION

The proposed management plan recognizes the need to allow for certain development and land use management within the planning area in a responsible manner that also recognizes the need to protect sensitive and unique cultural, visual, recreational, and biological resources. Specific projects or actions would be addressed in separate categorical exclusions or environmental assessments, as necessary.

The following mitigating measures would be used during plan implementation to reduce impacts:

1. Prior to surface disturbance, the prospective sites would be inventoried for cultural values, sensitive fish and wildlife resources, visual quality, and sensitive plant species. Mitigation would be developed to alleviate potential impacts of the proposed disturbance. If this is not possible and an alternative site is not available then the project would not be allowed. This analysis would be documented in a project specific environmental assessment.

2. Prior to implementation of any of the actions affecting Birch Creek Ranch, SHPO would need to act on BLM's request for National Historic Register eligibility. If SHPO concurs, all actions would be implemented in accordance with NHPA and related requirements.

3. BLM patrols/visitor contacts would be used to encourage compliance with use and access restrictions, provide assistance where needed, and disseminate information.

4. All actions occurring within or potentially impacting the Wilderness Study Areas affected by this plan would be reviewed and analyzed for compliance with the BLM's IMP prior to implementation. Failure to meet the IMP would result in relocation or denial of the action.

5. Signing, regulatory or informational, would be unobtrusive and blend with the environment as much as possible while still providing a message.

G. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed action would not result in any irreversible or irretrievable commitment of resources.

IX. APPENDICES

A. MAPS ..... Page 98

B. LEGAL DESCRIPTIONS OF THE ADMINISTRATIVE BOUNDARIES ..... Page 110

C. LAWS, REGULATIONS AND OTHER REFERENCES ..... Page 150

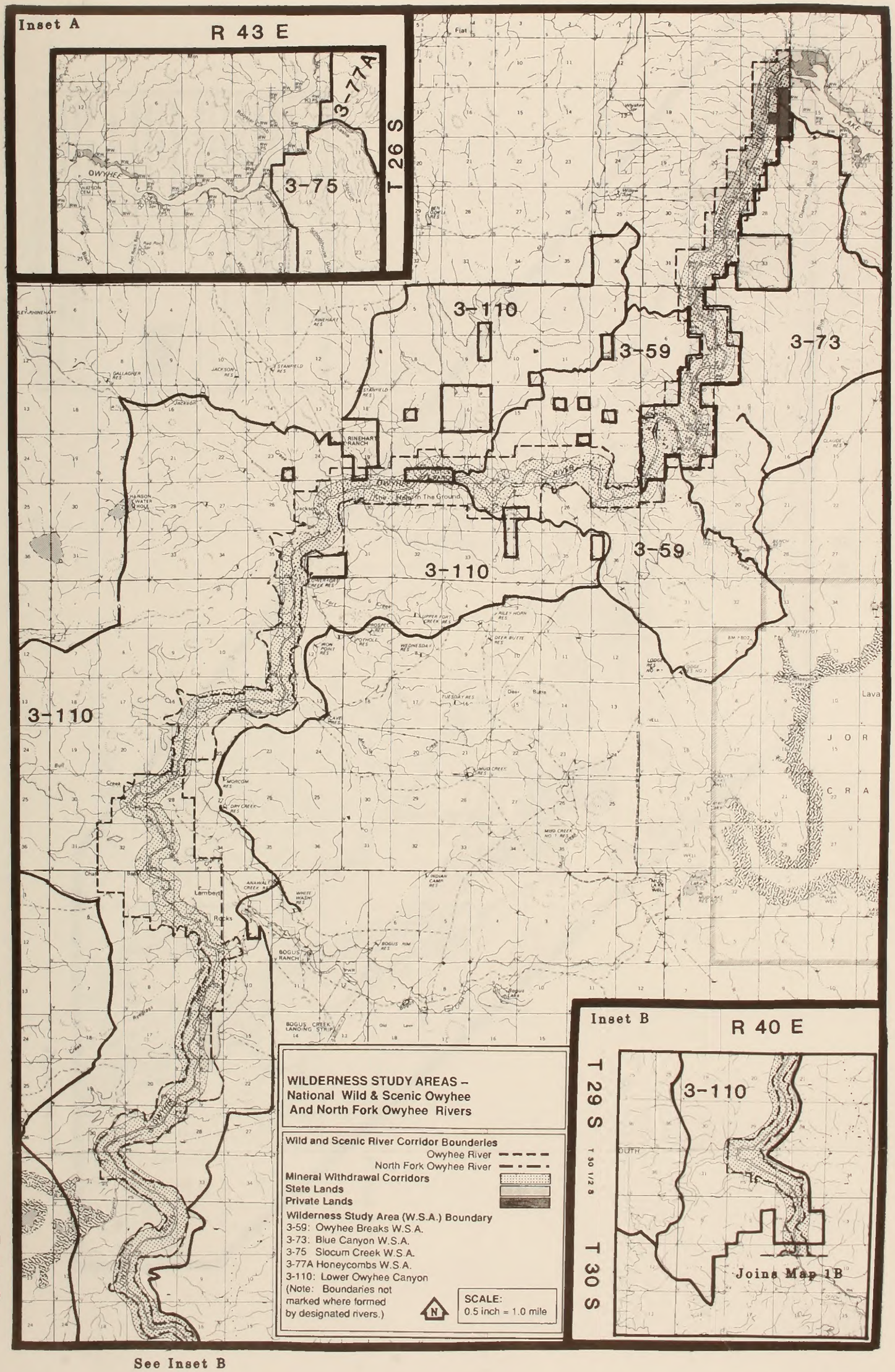
D. MANAGEMENT GUIDELINES AND STANDARDS FOR WILD RIVERS ..... Page 152

E. OREGON STATE SCENIC WATERWAY PROGRAM ..... Page 154

F. DEFINITIONS ..... Page 158

G. RECREATION OPPORTUNITY SPECTRUM ..... Page 160

H. PLANNING PARTICIPANTS - CONSULTATION/COORDINATION ..... Page 163


R 40 E
R 41 E
R 42 E
R 43 E
Inset A
T 26 S
T 27 S
T 28 S
T 29 S
T 30 S
3-77A
3-75
3-110
3-59
3-73
OWYHEE
See Inset A
See Inset B
Inset B
Joins Map 1B
WILDERNESS STUDY AREAS –
National Wild & Scenic Owyhee
And North Fork Owyhee Rivers
Wild and Scenic River Corridor Bounderies
Owyhee River
North Fork Owyhee River
Mineral Withdrawal Corridors
Stete Lands
Private Lands
Wilderness Study Area (W.S.A.) Boundary
3-59: Owyhee Breaks W.S.A.
3-73: Blue Canyon W.S.A.
3-75 Slocum Creek W.S.A.
3-77A Honeycombs W.S.A.
3-110: Lower Owyhee Canyon
(Note: Boundaries not
marked where formed
by designated rivers.)
N
SCALE:
0.5 inch = 1.0 mile

MAP 1-A

R 41 E Joins Map 1A

R 42 E

R 43 E

R 44 E

R 45 E

T 32 S

T 33 S

T 34 S

3-195

3-195

Big Grassy Mtn

Joins Map 1C

WILDERNESS STUDY AREAS AFFECTING NATIONAL WILD & SCENIC OWYHEE AND NORTH FORK OWYHEE RIVERS

Wild and Scenic River Corridor Boundaries
Owyhee River
North Fork Owyhee River

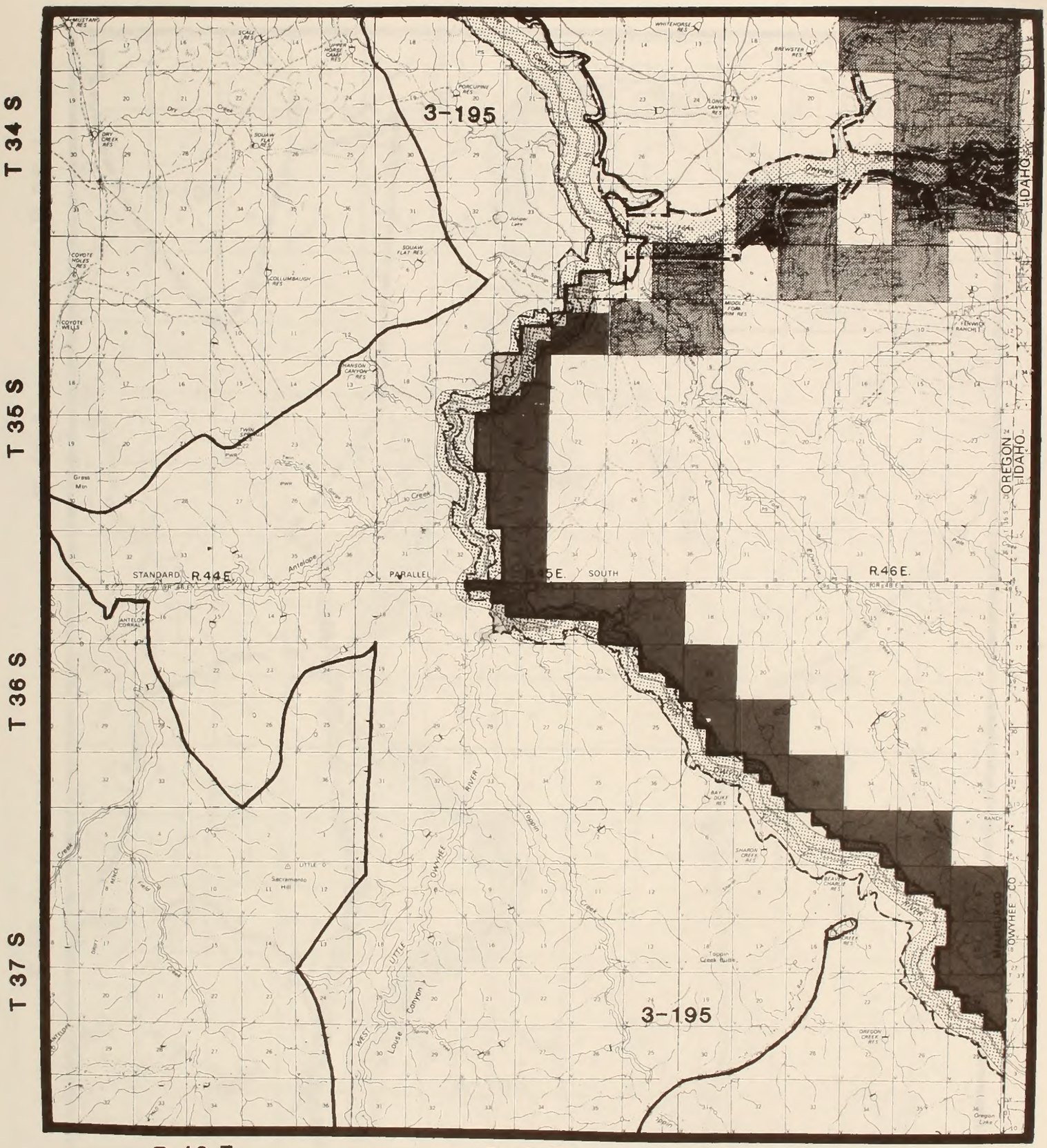
Mineral Withdrewel Corridors
Stete Lands
Privete Lands
Wilderness Study Area Boundery

3-195: Owyhee Canyon W.S.A.

(Note: Boundaries not marked whare formed by designated rivers)

SCALE:
0.5 inch = 1.0 mile

Joins Map 1B



WILDERNESS STUDY AREAS --
National Wild and Scenic Owyhee and North Fork Owyhee Rivers

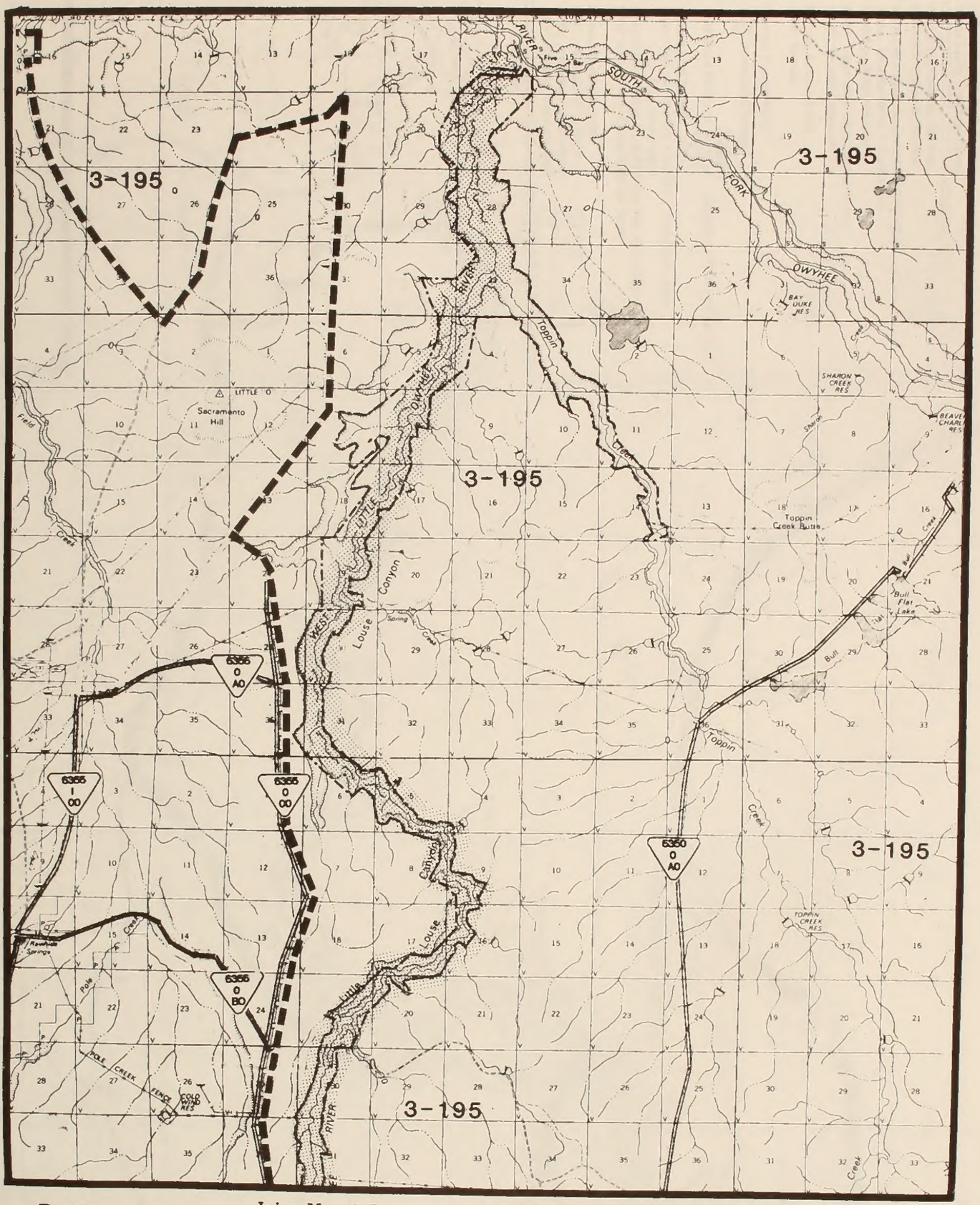
Wild and Scenic River Corridor Boundaries
Owyhee River
North Fork Owyhee River
Mineral Withdrewal Corridors
Stete Lands
Private Lands

Wilderness Study Area Boundery
(Note: Boundaries not marked where formed by designated rivers.)
3-195: Owyhee Canyon W.S.A.

N

SCALE:
0.5 inch = 1.0 mile

MAP 1-C



WILDERNESS STUDY AREAS--
National Wild and Scenic
West Little Owyhee River

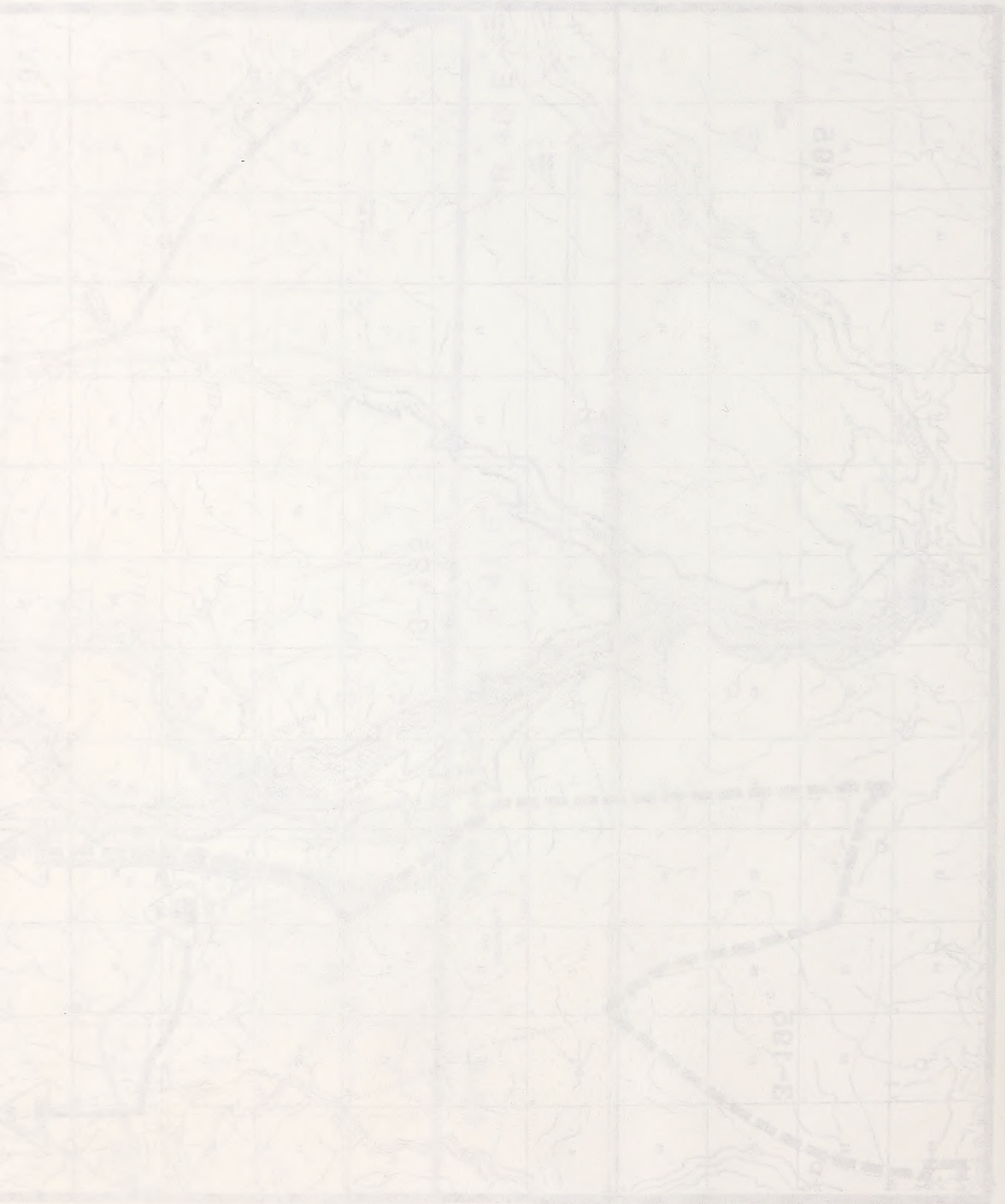
Wild & Scenic River Corridor Boundary
Mineral Withdrawal Corridor
Wilderness Study Area (W.S.A.) Boundary
(Note: Boundaries not marked where formed by designated rivers.)
3-195: Owyhee Canyon W.S.A.
Primary Access Route
Other Routes
BLM Road Numbers 6366 O 00 County Road Numbers (632)

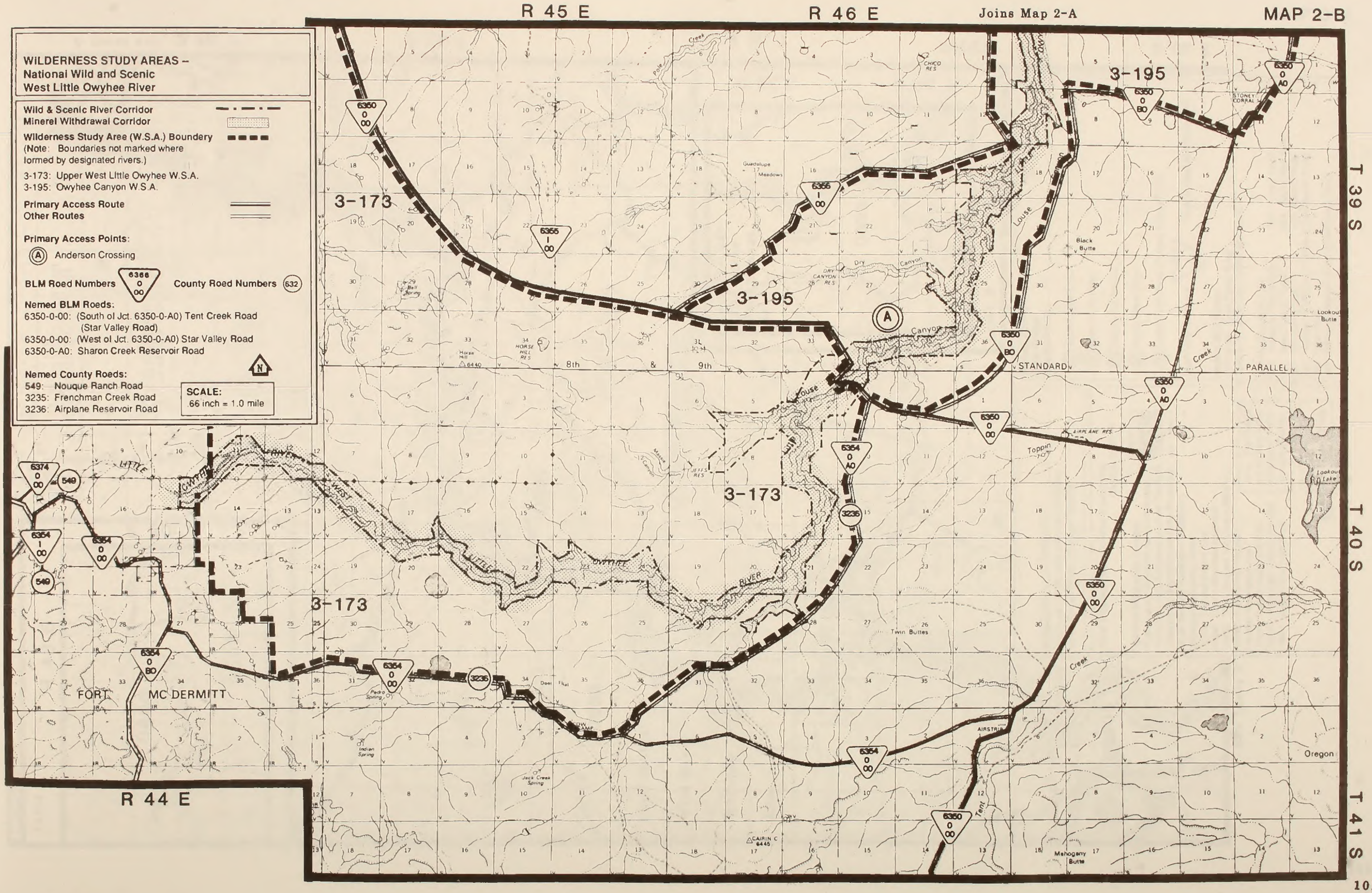
Named BLM Roads:
6350-0-A0: Sharon Creek Reservoir Road (Stoney Corral Road)

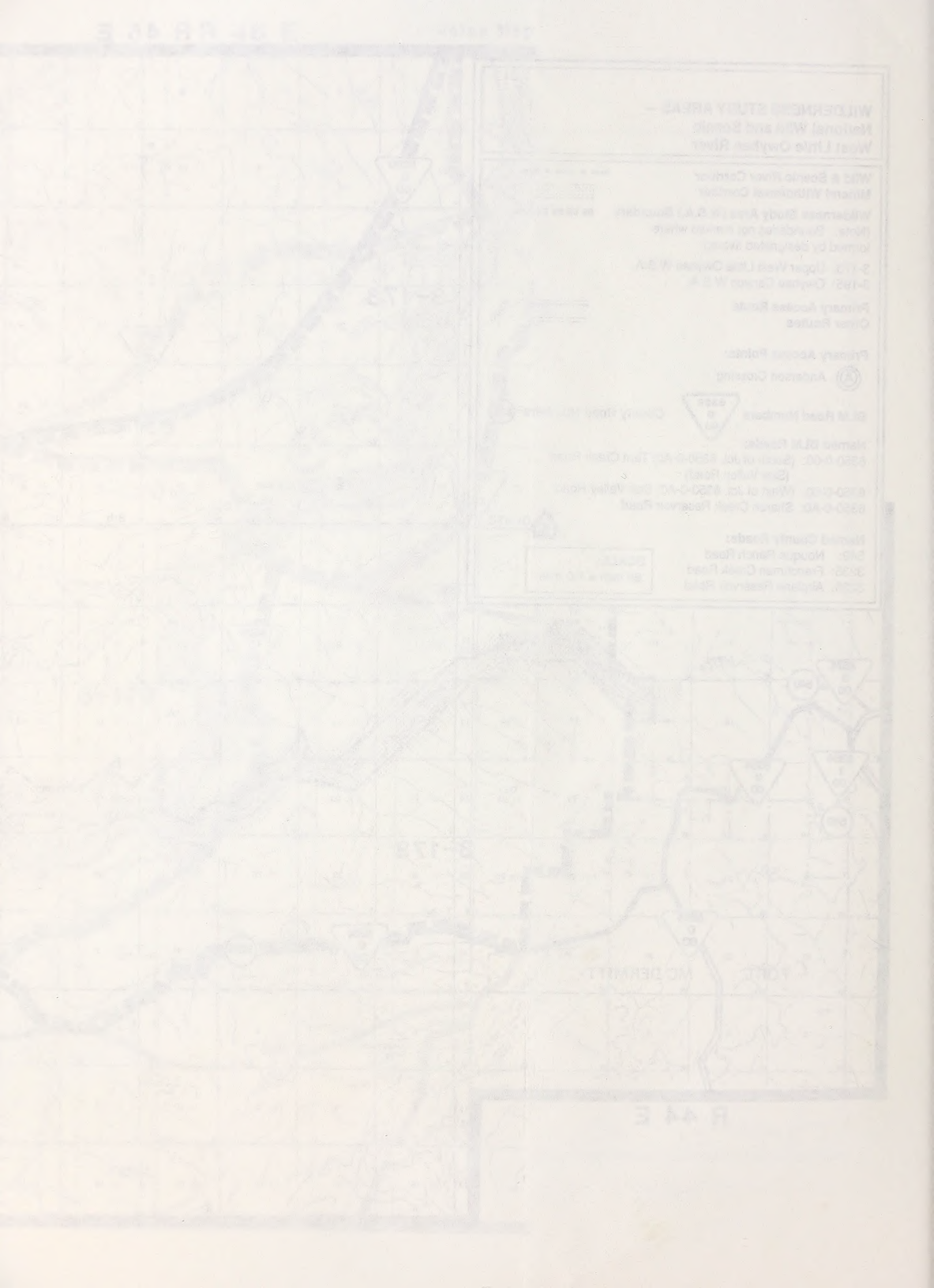
N

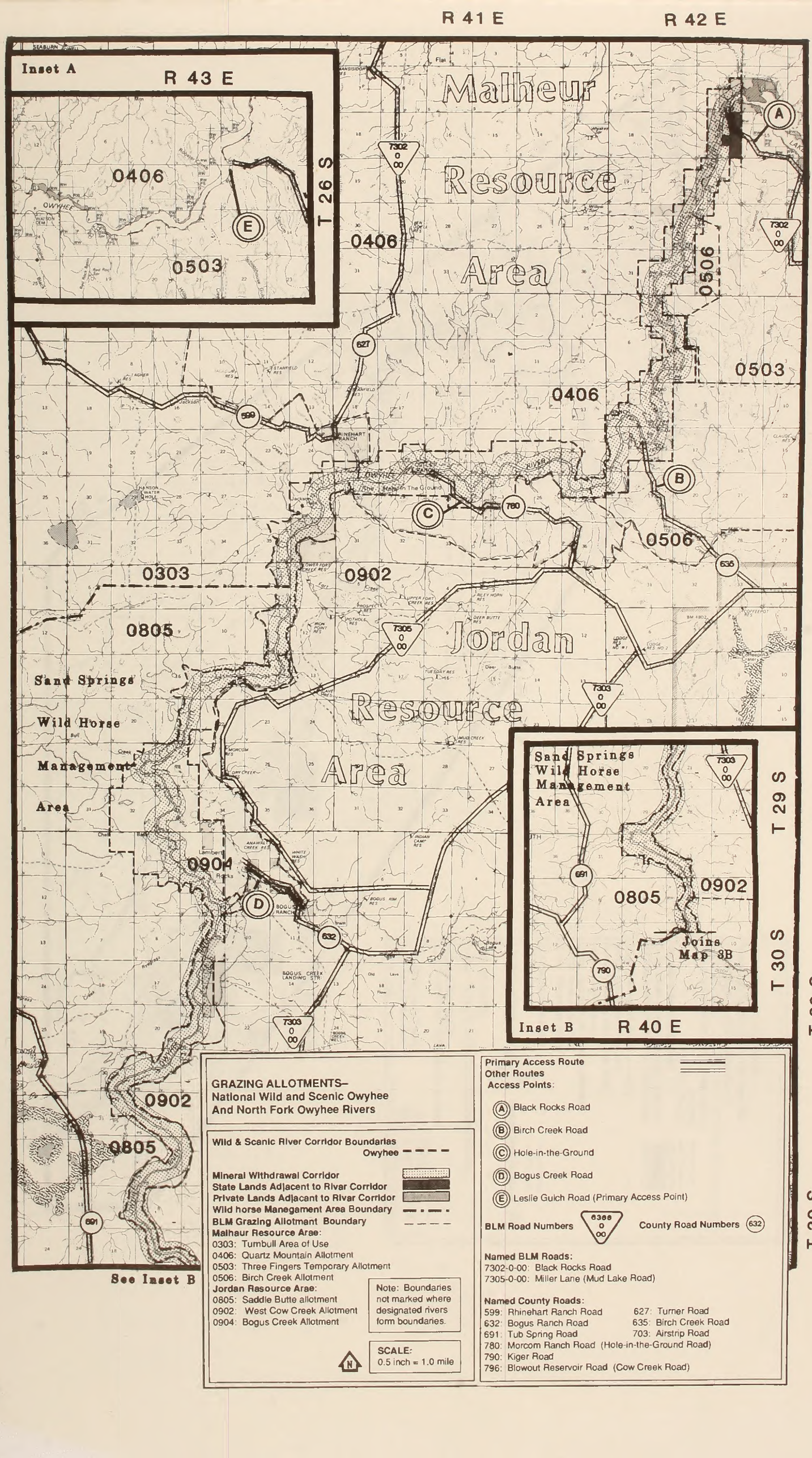
SCALE: .66 inch = 1.0 mile

MAP 2-A

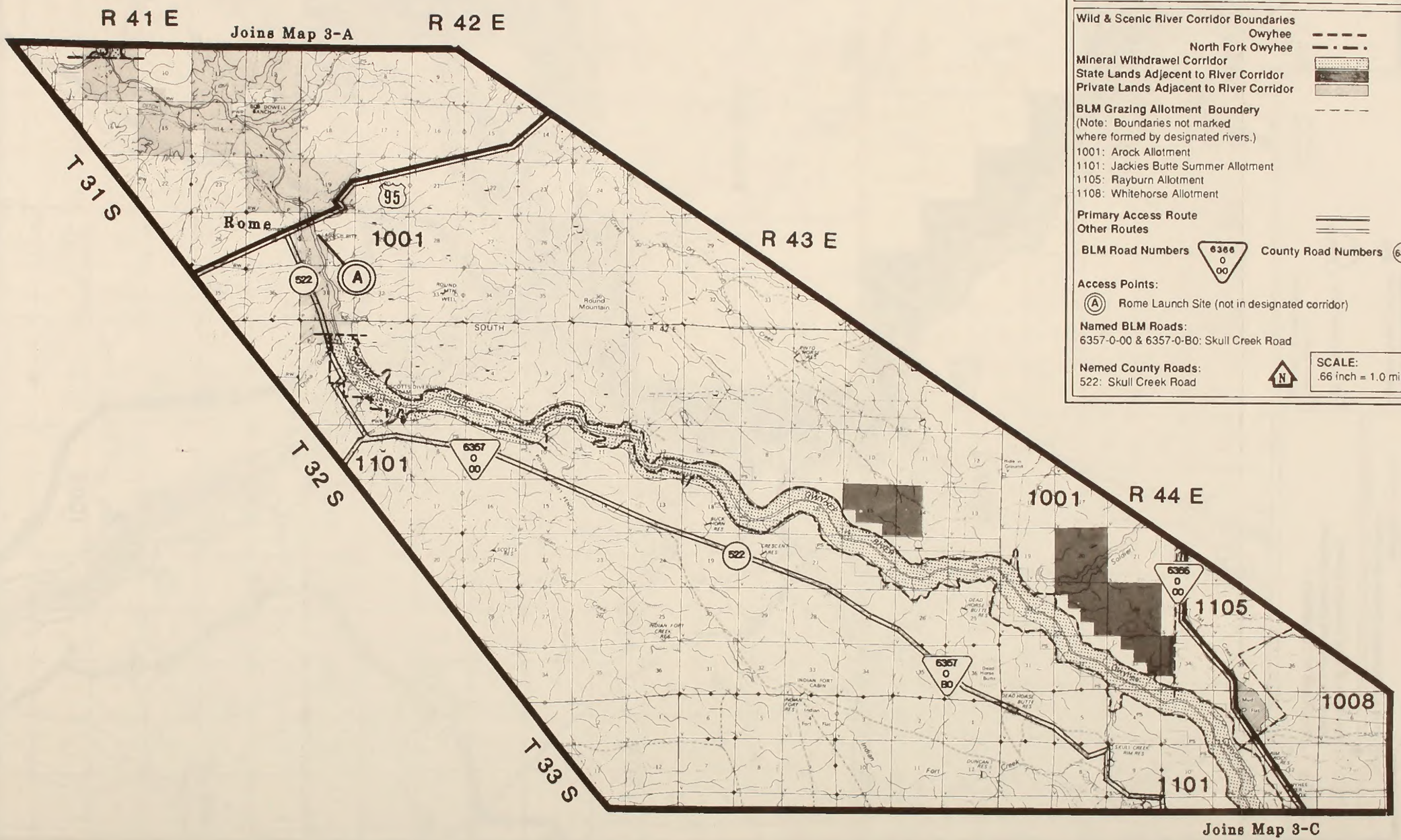



R 45 E
R 46 E
Joins Map 2-A
MAP 2-B
WILDERNESS STUDY AREAS –
National Wild and Scenic
West Little Owyhee River
Wild & Scenic River Corridor
Mineral Withdrawal Corridor
Wilderness Study Area (W.S.A.) Boundary
(Note: Boundaries not marked where formed by designated rivers.)
3-173: Upper West Little Owyhee W.S.A.
3-195: Owyhee Canyon W.S.A.
Primary Access Route
Other Routes
Primary Access Points:
Anderson Crossing
BLM Road Numbers
County Road Numbers
Named BLM Roads:
6350-0-00: (South of Jct. 6350-0-A0) Tent Creek Road (Star Valley Road)
6350-0-00: (West of Jct. 6350-0-A0) Star Valley Road
6350-0-A0: Sharon Creek Reservoir Road
Named County Roads:
549: Nouque Ranch Road
3235: Frenchman Creek Road
3236: Airplane Reservoir Road
SCALE:
.66 inch = 1.0 mile
3-173
3-195
3-173
3-173
8th & 9th
STANDARD PARALLEL
FORT MC DERMITT
Oregon
T 39 S
T 40 S
T 41 S
R 44 E




R 41 E
R 42 E
Inset A
R 43 E
T 26 S
0406
0503
Malheur
Resource
Area
0406
0506
0503
0406
See Inset A
T 26 S
T 27 S
0506
0303
0902
0805
Jordan
Resource
Area
Sand Springs
Wild Horse
Management
Area
0904
0902
0805
See Inset B
Sand Springs
Wild Horse
Management
Area
0805
0902
Joins
Map 3B
Inset B
R 40 E
T 29 S
T 28 S
T 30 S
T 29 S
T 30 S
GRAZING ALLOTMENTS–
National Wild and Scenic Owyhee
And North Fork Owyhee Rivers
Wild & Scenic River Corridor Boundaries
Owyhee
Mineral Withdrawal Corridor
State Lands Adjacent to River Corridor
Private Lands Adjacent to River Corridor
Wild horse Management Area Boundary
BLM Grazing Allotment Boundary
Malheur Resource Area:
0303: Turnbull Area of Use
0406: Quartz Mountain Allotment
0503: Three Fingers Temporary Allotment
0506: Birch Creek Allotment
Jordan Resource Area:
0805: Saddle Butte allotment
0902: West Cow Creek Allotment
0904: Bogus Creek Allotment
Note: Boundaries not marked where designated rivers form boundaries.
SCALE:
0.5 inch = 1.0 mile
Primary Access Route
Other Routes
Access Points:
A Black Rocks Road
B Birch Creek Road
C Hole-in-the-Ground
D Bogus Creek Road
E Leslie Gulch Road (Primary Access Point)
BLM Road Numbers
County Road Numbers
Named BLM Roads:
7302-0-00: Black Rocks Road
7305-0-00: Miller Lane (Mud Lake Road)
Named County Roads:
599: Rhinehart Ranch Road
632: Bogus Ranch Road
691: Tub Spring Road
780: Morcom Ranch Road (Hole-in-the-Ground Road)
790: Kiger Road
796: Blowout Reservoir Road (Cow Creek Road)
627: Turner Road
635: Birch Creek Road
703: Airstrip Road

MAP 3-A



GRAZING ALLOTMENTS –
National Wild and Scenic Owyhee
And North Fork Owyhee Rivers

Wild & Scenic River Corridor Boundaries
Owyhee
North Fork Owyhee
Mineral Withdrawel Corridor
State Lands Adjecent to River Corridor
Private Lands Adjacent to River Corridor

BLM Grazing Allotment Boundery
(Note: Boundaries not marked where formed by designated rivers.)
1001: Arock Allotment
1101: Jackies Butte Summer Allotment
1105: Rayburn Allotment
1108: Whitehorse Allotment

Primary Access Route
Other Routes

BLM Road Numbers 6366 0 00 County Road Numbers (632)

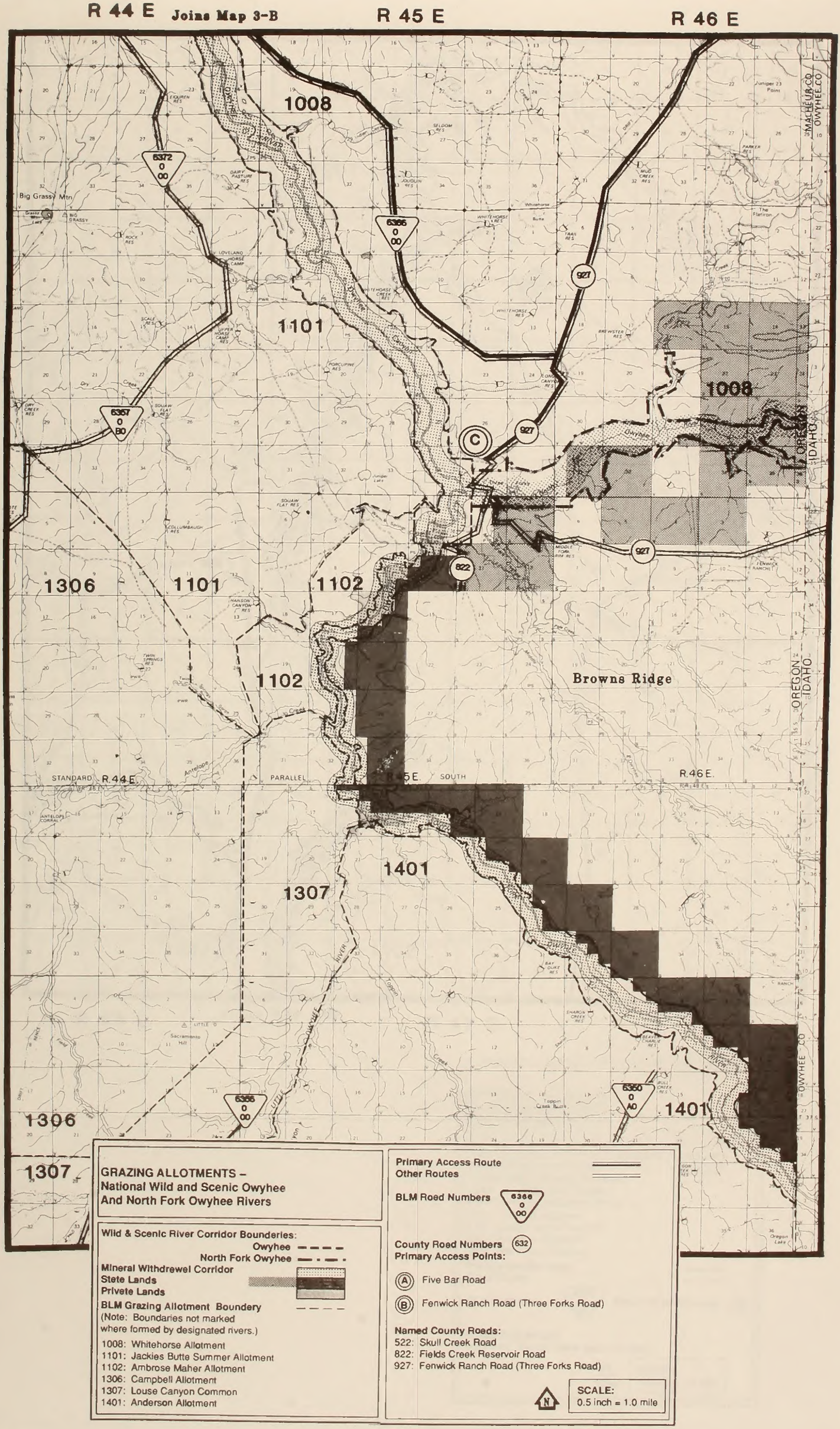
Access Points:
(A) Rome Launch Site (not in designated corridor)

Named BLM Roads:
6357-0-00 & 6357-0-B0: Skull Creek Road

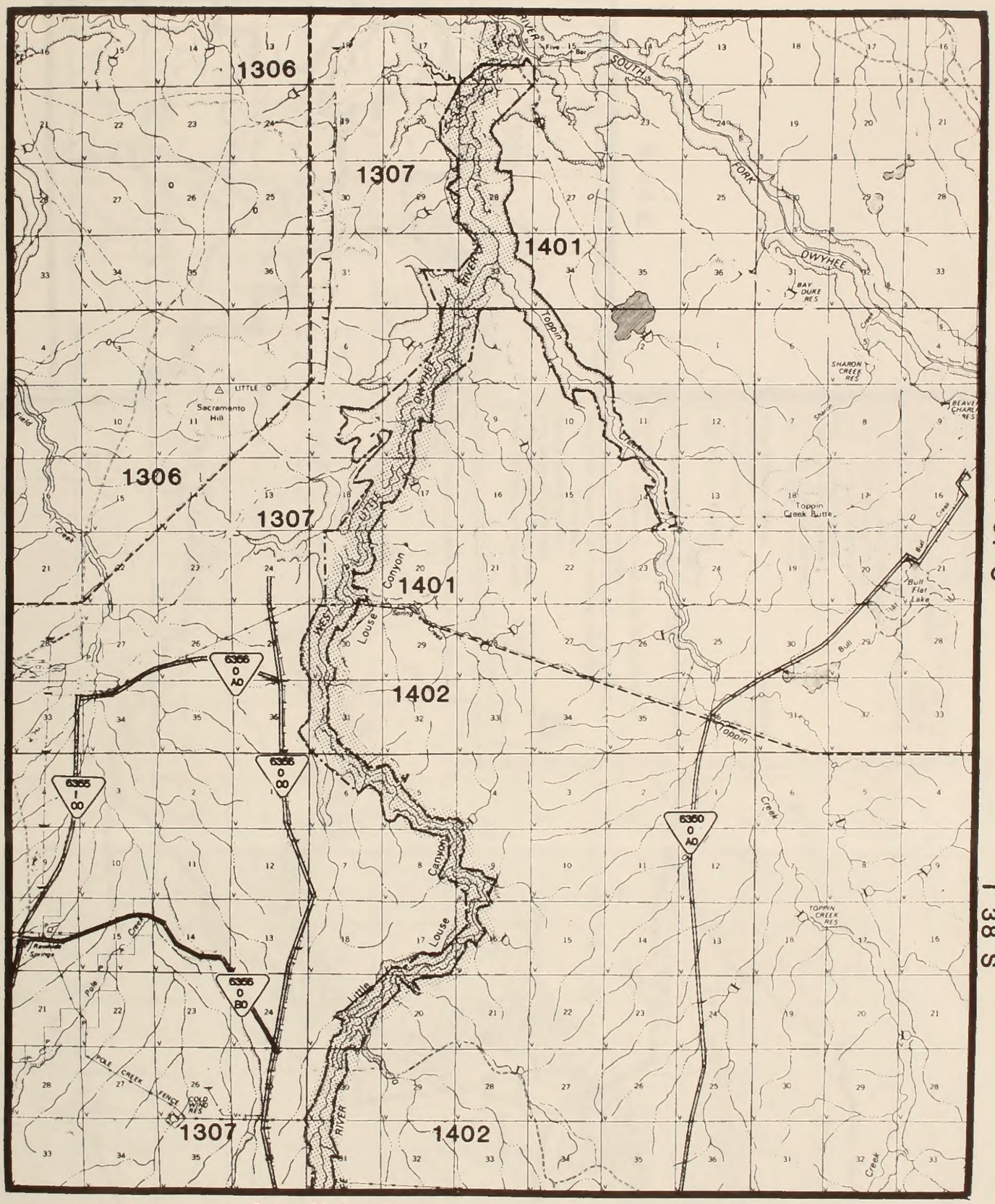
Nemed County Roads:
522: Skull Creek Road

N

SCALE:
.66 inch = 1.0 mile


R 44 E
Joins Map 3-B
R 45 E
R 46 E
T 33 S
T 34 S
T 35 S
T 36 S
T 37 S
1008
1101
1008
1306
1101
1102
1102
1401
1307
1306
1401
1307
Browns Ridge
Big Grassy Mtn
OREGON
IDAHO
OWYHEE CO
MALHEUR CO
927
822
STANDARD PARALLEL SOUTH
R 44 E.
R 45 E.
R 46 E.
GRAZING ALLOTMENTS –
National Wild and Scenic Owyhee
And North Fork Owyhee Rivers
Wild & Scenic River Corridor Boundaries:
Owyhee
North Fork Owyhee
Mineral Withdrewel Corridor
Stete Lands
Privete Lands
BLM Grazing Allotment Boundery
(Note: Boundaries not marked
where formed by designated rivers.)
1008: Whitehorse Allotment
1101: Jackies Butte Summer Allotment
1102: Ambrose Maher Allotment
1306: Campbell Allotment
1307: Louse Canyon Common
1401: Anderson Allotment
Primary Access Route
Other Routes
BLM Road Numbers
County Road Numbers
Primary Access Points:
(A) Five Bar Road
(B) Fenwick Ranch Road (Three Forks Road)
Named County Roads:
522: Skull Creek Road
822: Fields Creek Reservoir Road
927: Fenwick Ranch Road (Three Forks Road)
N
SCALE:
0.5 inch = 1.0 mile

MAP 3-C



GRAZING ALLOTMENTS –
National Wild and Scenic
West Little Owyhee River

Wild end Scenic River Corridor Boundery
Minerel Withdrewel Corridor
BLM Grazing Allotment Boundery
(Note: Boundaries not marked where formed by designated rivers.)

1306: Campbell Allotment
1307: Louse Canyon Common
1401: Anderson Allotment
1402: Star Valley Common

Primary Access Route
Other Routes

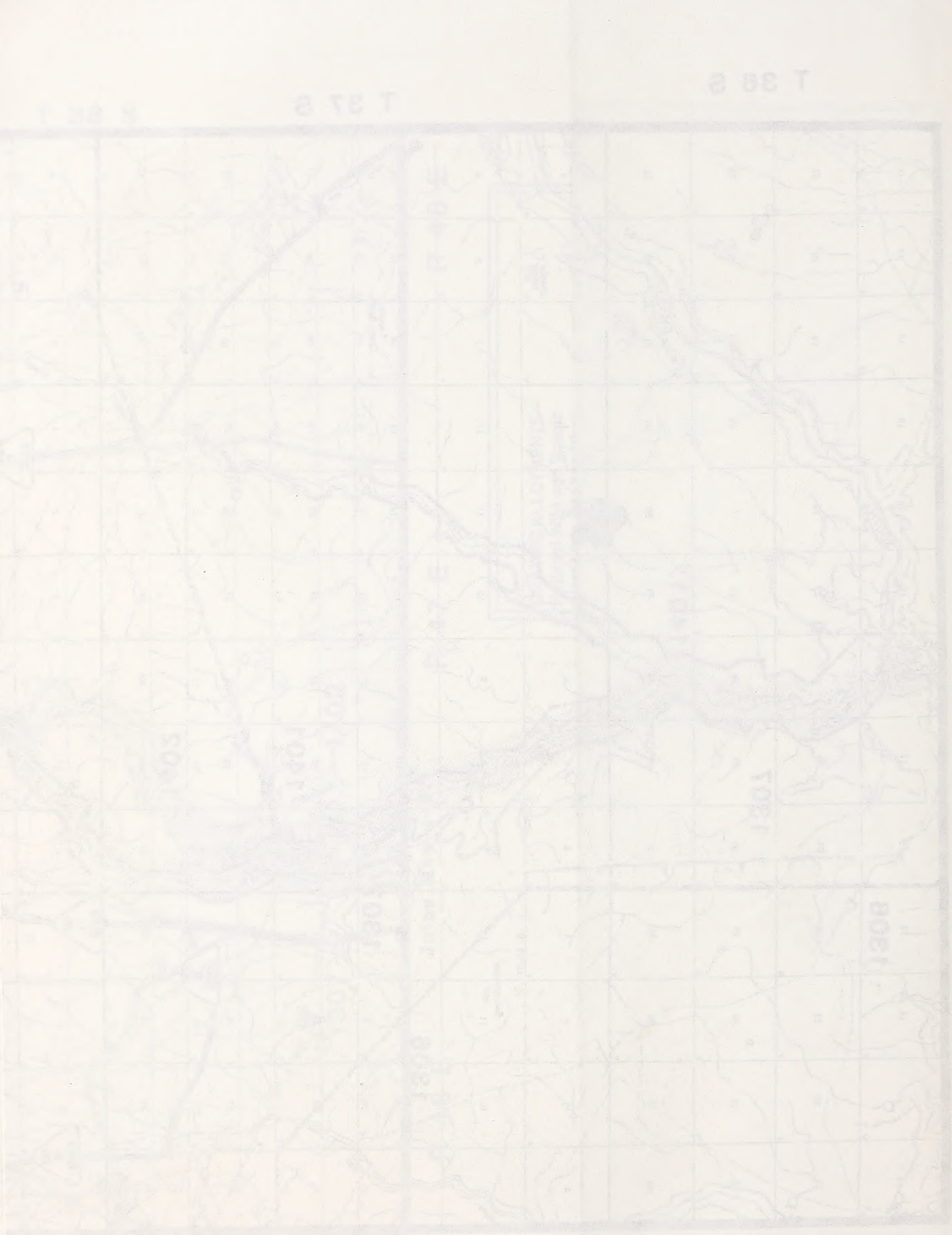
BLM Road Numbers (6356 0 00) County Road Numbers (632)

Named BLM Roads:
6350-0-A0: Sharon Creek Reservoir Road

N

SCALE:
.66 inch = 1.0 mile

MAP 4-A



R 45 E

R 46 E

R 47 E

Joins Map 4-A

MAP 4-B

T 39 S

T 40 S

T 41 S

R 44 E

GRAZING ALLOTMENTS –
National Wild and Scenic
West Little Owyhee River

Wild & Scenic River Corridor Boundary
Mineral Withdrawal Corridor
Fort McDermitt Indian Reservation Boundary
BLM Grazing Allotment Boundary
(Note: Boundaries not marked where formed by designated rivers.)
1303: Sherburn Allotment
1306: Campbell Allotment
1307: Louse Canyon Common
1402: Star Valley Common

Primary Access Route
Other Routes
Access Points:
(A) Anderson Crossing

BLM Road Numbers 6366 0 00 **County Road Numbers** (632)

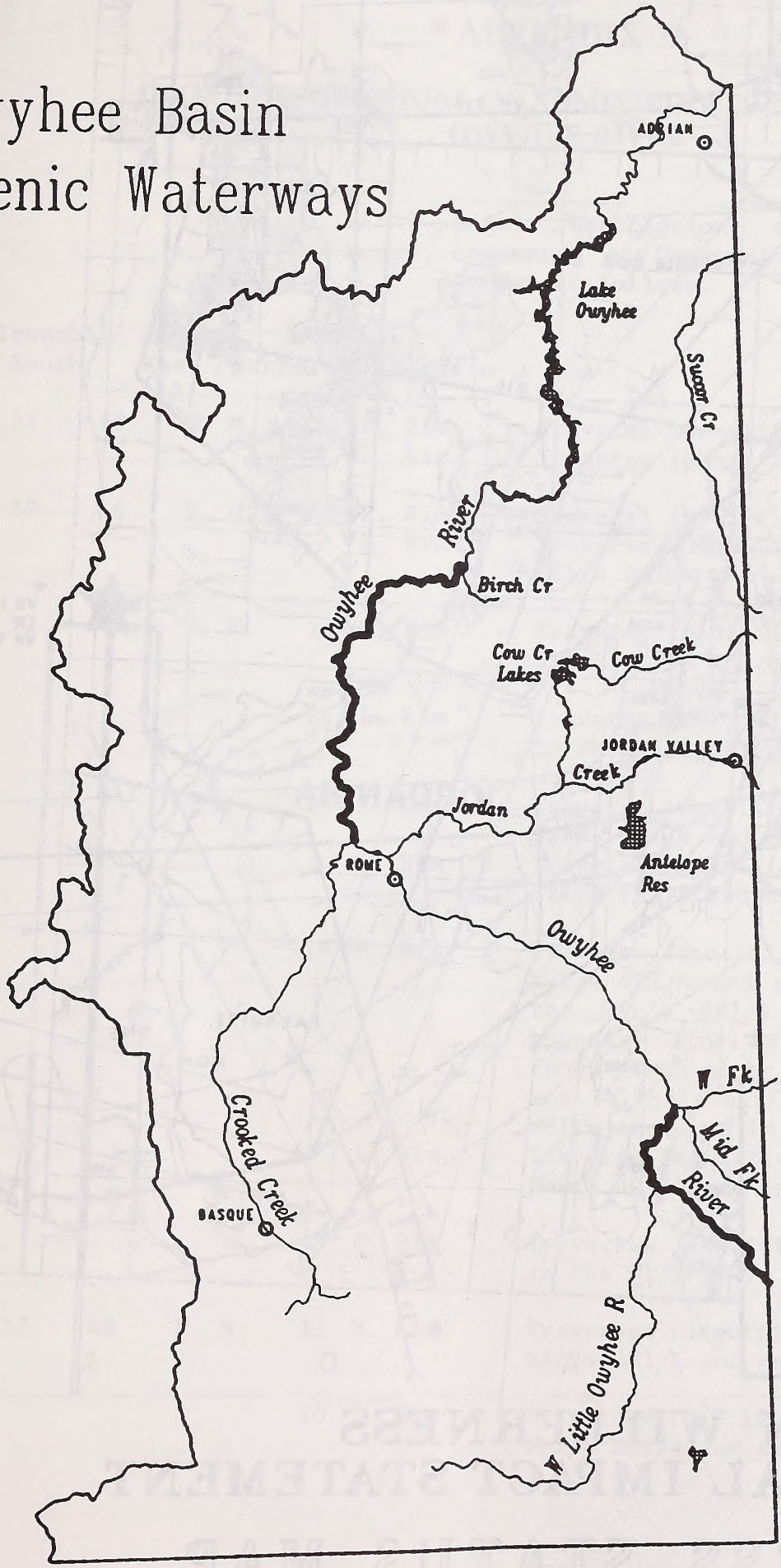
Named BLM Roads:
6350-0-00: (South of Jct. 6350-0-A0) Tent Creek Road (Star Valley Road)
6350-0-00: (West of Jct. 6350-0-A0) Star Valley Road
6350-0-A0: Sharon Creek Reservoir Road (Stoney Corral Road)

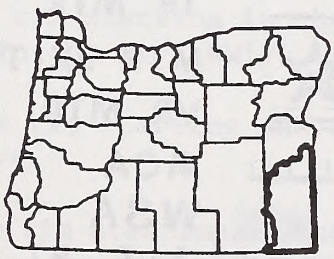
Named County Roads:
549: Nouque Ranch Road
3235: Frenchman Creek Road
3236: Airplane Reservoir Road

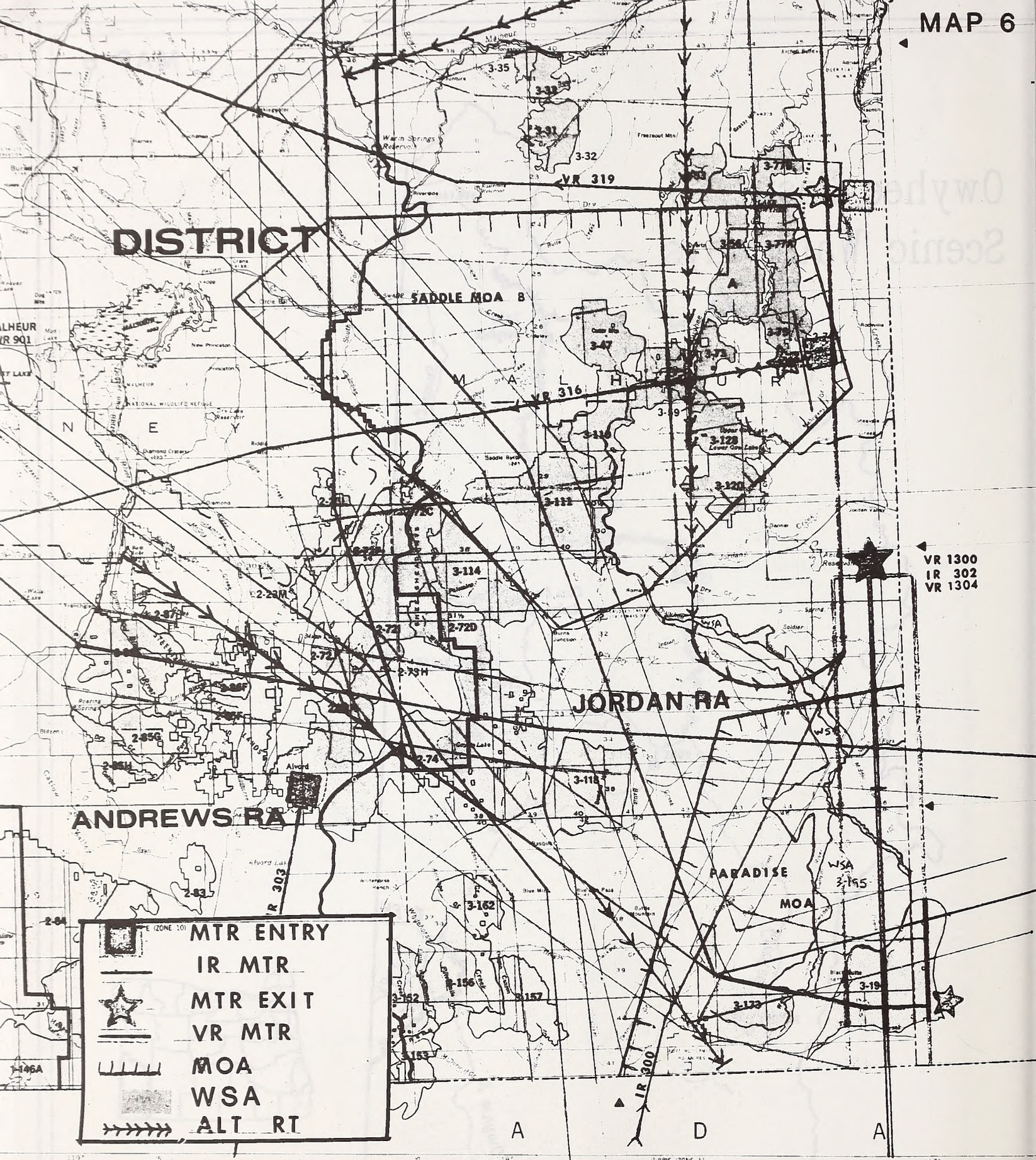
N

SCALE:
.66 inch = 1.0 mile

Owyhee Basin
Scenic Waterways







OREGON WILDERNESS ENVIRONMENTAL IMPACT STATEMENT

WILDERNESS STATUS MAP

1989

Scale 1:1,000,000
1 inch equals Approximately 16 miles

10 0 10 20 30 40 Miles

APPENDIX B

LEGAL DESCRIPTIONS OF ADMINISTRATIVE BOUNDARIES OWYHEE RIVER

Legal description of administrative boundary commences at Oregon-Idaho stateline and goes down stream as follows.

Map No.	Township South	Range East	Meridian	Section	Description
1 of 17	37	39	W. M.	30 R. Rim	Traverse identifiable rim through Lots 1 and 2
				L. Rim	Traverse identifiable rim through Lot 4
	37	48	W. M.	25 R. Rim	Traverse identifiable rim through E1/2 E1/2
				L. Rim	Traverse identifiable rim starting at the N1/2 SE1/4 SE1/4 and ends at the N1/2 NW1/4 NW1/4
	37	48	W. M.	24 R. Rim	Traverse identifiable rim starting at the S1/2 SE1/4 SE1/4 and ends at the N1/2 SW1/4 NW1/4
				26 L. Rim	Traverse identifiable rim starting and ending in the N1/2 NE1/4 NE1/4
				23 R. Rim	Traverse identifiable rim starting in the N1/2 SE1/4 SE1/4 and ends in the E1/2 NW1/4 NE1/4
				L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in the E1/2 NW1/4 NW1/4
				14 R. Rim	Traverse identifiable rim starting in the E1/2 SW1/4 SE1/4 and rim ends in the SW corner of the SE1/4 SE1/4 NE1/4 and along east-west boundary line between the NE1/4 and SE1/4, fence north along section line between Sec. 13 and 14 to identifiable rim in the NE1/4 SE1/4 NE1/4 and ends in the E1/2 NE1/4 NE1/4
				L. Rim	Traverse identifiable rim starting in the S1/2 SW1/4 SW1/4 and ends in the N1/2 NW1/4 NW1/4
				15 R. Rim	Traverses identifiable rim starting and ending in the N1/2 NE1/4 NE1/4
1 of 17	37	48	W. M.	11 R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in the N1/2 SW1/4 NW1/4
				10 L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in tne N1/2 SW1/4 NW1/4

2 of 17	37	48	W. M.	11	R. Rim	Traverses identifiable rim starting and ending in the NW1/4 NW1/4
				10	R. Rim	Traverses identifiable rim starting and ends in the NE 1/4 NE1/4
					L. Rim	Traverses identifiable rim starting and ending in the N1/2 NW1/4
				3	R. Rim	Traverses identifiable rim starts in the SE1/4 SE1/4 and ends in the NW1/4 SW1/4
				9	L. Rim	Traverses identifiable rim starts and ends in the N1/2 N1/2
				4	R. Rim	Traverses identifiable rim starts in the E1/2 NE1/4 SE1/4 and ends in Lots 3 and 4
					L. Rim	Traverses identifiable rim starts and ends in the SW1/4 SW1/4
				5	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ends in Lot 4
2 of 17	36	48	W. M.	33	R. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
				32	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ends in the NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting and ending W1/2 SW1/4
2 & 3 of 17				31	R. Rim	Traverses identifiable rim starting at the section corner to sections 29, 30, 31 and 32 and ends in the NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ends in Lot 1
				30	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in Lot 1
					L. Rim	Traverses identifiable rim starting in Lot 4 and ending in Lot 3
3 of 17	31	47	W. M.	24	R. Rim	Traverses identifiable rim starting and in the S1/2 SE1/4 SE1/4 and ends in the NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ends in the W1/2 NW1/4 SE1/4
				23	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ends in the N1/2 NW1/4 NE1/4
				25	R. Rim	Traverses identifiable rim starting and ending in NE1/4 NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2

						NE1/4 SE1/4 and ending in the N1/2 NW1/4 NE1/4
3 of 17	36	47	W. M.	13	R. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
				14	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ends in the W1/2 SW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ends in the W1/2 NW1/4 SW1/4
				15	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ends in the W1/2 NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ends following the East West Section Line between 22 and 15 in the SW1/4 SE1/4 SE1/4, thence west along east west section line between 15 and 22 to identifiable rim in the SW1/4 SE1/4 SW1/4 thence along rim to NW1/4 SW1/4 SW1/4
				16	R. Rim	Traverses identifiable rim starting and ending in the NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the SE corner of SE1/4 NE1/4 SE1/4 and ending at the center of the east west line between the NW1/4 SE1/4 and SW1/4 SE1/4 thence west along line to SW corner of NW1/4 SE1/4 thence north to identifiable rim to east west line between the NW1/4 SW1/4 NE1/4 and SW1/4 NW1/4 NE1/4 thence north at the SW corner of the NW1/4 NE1/4 thence to the north south section line between sections 16 and 17 in the SW1/4 NW1/4 NW1/4 thence north along section line across drainage to identifiable rim in NW1/4 NW1/4 NW1/4 and ending on the north section line between sections 9 and 16 ending NW1/4 NW1/4 NW1/4
3 of 17				9	R. Rim	Traverses identifiable rim starting and ending in Lot 1 at the township line between 35S and 36S. Thence west along township line to common section corner to sections 32 and 33 T. 35S., and section 9, T. 36 S.
					L. Rim	Traverses identifiable rim starting and ending in lot 4
	35	45	W. M.	33	R. Rim	Traverses section line between Section 32 and 33 starting the SW corner of section 33 thence north along section line to center of SW1/4 NW1/4 SW1/4 thence diagonally east to the identifiable rim in SW1/4 NW1/4 SW1/4 to SW corner of NW1/4 NW1/4 thence north along north south section line between 32 and 33 crossing

						drainage to identifiable rim and ending at the NW corner of the SW1/4 NW1/4 NW1/4
				32	R. Rim	Traverses identifiable rim starting and ending in the NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending N1/2 NE1/4 NW1/4
				29	R. Rim	Traverses identifiable rim starting SW1/4 SE1/4 SE1/4 and ending in the NE1/4 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 to north south subdivision line between the E1/2 and N1/2 of SW1/4 across drainage to corner of the SW1/4 NE1/4 SW1/4 thence east across drainage to identifiable rim thence along to ending in the N1/2 NE1/4 NW1/4
3 of 17	35	45	W. M.	20	R. Rim	Traverse elevation line (4500 ft) north starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 NE1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending N1/2 NW1/4 NW1/4
3 & 4 of 17				17	R. Rim	Traverses elevation line (4500 ft) north starting in S1/2 SE1/4 SW1/4 and ending in the E1/2 SE1/4 SE1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending E1/2 NE1/4 SE1/4
				21	R. Rim	Traverses elevation line (4500 ft) starting and ending NE1/4 NE1/4
				16	R. Rim	Traverses elevation line (4500 ft) starting in the W1/2 SW1/4 SW1/4 to NW1/4 corner of the NW1/4 SE1/4 thence east to east quarter corner between section 16 and 17 thence north along elevation line (4500 ft) ending in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses north on elevation line (4400 ft) to the N1/2 NE1/4 NW1/4
4 of 17				9	R. Rim	Traverses elevation line (4400 ft) north starting in the S1/2 SW1/4 SE1/4 and ending in the E1/2 SE1/4 SE1/4
					L. Rim	Traverses elevation line (4400 ft) north starting in the SE1/4 SW1/4 and drops to 4300 ft elevation line and ending in the E1/2 NE1/4 SE1/4
				10	R. Rim	Traverses identifiable rim starting at the W1/2 SW1/4 SW1/4 and ending in the N1/2 NW1/4 NE1/4

					thence east down section line between sections 3 and 10 to ending at corner common to sections 2, 3, 10 and 11 T. 35 S., R. 45 E.,
4 of 17			10	L. Rim	Traverses elevation line (4300 ft) starting in the S1/2 SW1/4 and NW1/4 to the point where 4300 ft. elevation line intersects the north-south subdivision of NE1/4 NW1/4 and NW1/4 NW1/4 thence north along north-south subdivision line and ending in the NE corner of the NW1/4 NW1/4 on east-west section line between sections 3 and 10
	35	45 W. M.	3	L. Rim	Starting SE corner of the SW1/4 SW1/4 thence west along east-west section line between sections 3 and 10 to SW corner of the E1/2 W1/2 W1/2 thence north along subdivision line between the E1/2 W1/2 W1/2 and W1/2 W1/2 W1/2 to intersection of the identifiable rim at elevations 4800 ft and traverse the identifiable rim and ending in lots 1 and 2
			2	R. Rim	Starting at sec. corner common to 2,3,10 and 11 thence east along sec. line to the southeast corner of the SW1/4 SW1/4 thence north to the northeast corner of the NW1/4 NW1/4 thence east on township line to the southeast corner of the SW1/4 SW1/4 sec. 35 T 34S R45 E
	34	45 W. M.	35	R. Rim	Starting at southeast corner of the SW1/4 SW1/4 thence north to the northeast corner of the NW1/4 SW1/4 thence west ending at the west quarter corner sec. 35
4 of 17			34	R. Rim	Starting on the east quarter corner of section 34 thence west to SW corner of SE1/4 SE1/4 NE1/4 thence north to the NW corner SE1/4 SE1/4 NE1/4 thence west to center of the SW1/4 NE1/4, thence north and ending at the NW corner of NE1/4 NW1/4 NE1/4
				L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
			27	R. Rim	Starting at the SW corner of the SE1/4 SW1/4 SE1/4 thence north to identifiable rim in center of the NW1/4 SE1/4 then ending by traverse of identifiable rim to the N1/2 NW1/4 NE1/4
				L. Rim	Traverse identifiable rim starting and ending in the S1/2 SW1/4 SW1/4
			28	L. Rim	Traverse identifiable rim starting in the E1/2

						SE1/4 SE1/4 and ending in the East quarter corner of section 28 thence north ending at section corner common to section 21, 22, 27, and 28
4 of 17	34	45	W. M.	22	R. Rim	Traverse identifiable rim starting in the S1/2 SW1/4 SE1/4 thence to north-south subdivision line between the NE1/4 SE1/4 and the NW1/4 SE1/4 thence north along subdivision line to identifiable rim ending at the north quarter corner of section 22
				21	L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NW1/4
				15	R. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 SW1/4
				16	R. Rim	Traverse identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 N1/2 NW1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 SW1/4
				17	L. Rim	Traverse identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
				18	L. Rim	Traverse identifiable rim starting and ending in the NE1/4 NE1/4
				9	R. Rim	Traverse identifiable rim starting and ending in the SW1/4 SW1/4
				8	R. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 and ending in the NE1/4 NW1/4
				7	L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 to the SW corner of the NW1/4 NW1/4 SE1/4 thence north along subdivision line to identifiable rim then along rim ending in the N1/2 NE1/4 NW1/4
4 & 5 of 17	34	45	W. M.	5	R. Rim	Traverses identifiable rim starting in the S1/2 SE 1/4 SW1/4 and ending lot 4
				6	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in lot 5
5 of 17	33	45	W. M.	32	R. Rim	Traverses identifiable rim starting in the W1/2 SW1/4 and ending in the W1/2 SW1/4

5 & 6 of 17				31	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in lot 3
5 & 6 of 17				30	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in lot 3
				19	R. Rim	Traverses identifiable rim starting and ending in lot 10
6 of 17	33	44	W. M.	36	L. Rim	Traverses identifiable rim starting and ending in the N1/2 NE1/4
				25	L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the W1/2 NW1/4 NW1/4
				24	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting and ending at the corner common to section 23, 24, 25, and 26
				23	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NE1/4
6 of 17	33	44	W. M.	13	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 ending in the N1/2 NE1/4 NW1/4
				14	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NW1/4
				12	R. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the west quarter corner section 12
				11	R. Rim	Traverse identifiable rim starting in the east quarter corner of section 11 and ending in the north quarter corner section 11
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 NW1/4
				10	L. Rim	Traverse identifiable rim starting and ending in the NE1/4 NE1/4
				2	R. Rim	Traverse identifiable rim starting in the south quarter corner section 2 and ending in lot 4
				3	R. Rim	Traverse identifiable rim starting and ending N1/2 NE1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4

				4	L. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in N1/2 lot 4 except line drops to elevation line (4400 ft) in bottom of Skull Creek.
6 of 17	32	44	W. M.	34	R. Rim	Traverse identifiable rim starting in the south quarter corner of section 34 and ending in the W1/2 SW1/4 SW1/4
				33	R. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 NW1/4 NW1/4
					L. Rim	Traverse identifiable rim starting and ending in the W1/2 SW1/4 SW1/4
				32	R. Rim	Traverse identifiable rim starting and ending in the N1/2 NE1/4
					L. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 NW1/4 NW1/4
				31	L. Rim	Traverse identifiable rim starting and ending in the NE1/4 NE1/4
				29	R. Rim	Traverse identifiable rim starting at the south quarter corner of section 29 and ending at the northwest corner NW1/4 SW1/4 NW1/4
				30	R. Rim	Starting at the northeast corner of NE1/4 SE1/4 NE1/4 running west on subdivision line between N1/2 S1/2 and S1/2 NE1/4 across Soldier Creek to identifiable rim and traverses to end in lot 1
					L. Rim	Traverse identifiable rim starting and ending in S1/2 S1/2
6,7,8 &9 of 17	32	44	W. M.	19	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in lots 2 and 3
	32	43	W. M.	24	R. Rim	Traverses identifiable rim thru N1/2 of section 24
					L. Rim	Traverses identifiable rim starting and ending in the S1/2 of section 24
				23	R. Rim	Traverses identifiable rim starting and ending in the N1/2 of section 23
					L. Rim	Traverses identifiable rim starting and ending in the S1/2 of section 23
				26	L. Rim	Traverses identifiable rim starting and ending in the N1/2 of section 26
				22	R. Rim	Traverses identifiable rim starting and ending

						in the NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 NW1/4
				15	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 and ending in the W1/2 SW1/4 NW1/4
9 of 17				16	R. Rim	Traverses identifiable rim starting and ending in the N1/2
					L. Rim	Traverses identifiable rim starting and ending in the S1/2
9 of 17	32	43	W. M.	17	R. Rim	Traverses identifiable rim starting and ending in the N1/2
					L. Rim	Traverses identifiable rim starting and ending in the S1/2
				18	L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending at the north quarter corner section 18, and traverses identifiable rim starting and ending in lot 1
					R. Rim	Traverses identifiable rim starting and ending on section corner common to section 7, 8, 17, and 18
				7	R. Rim	Traverses identifiable rim starting on section corner common to section 7, 8, 17, and 18 and ending in the W1/2 NW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting and ending S1/2 SW1/4
9&10 of 17	32	42	W. M.	12	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
10 of 17				11	R. Rim	Traverses identifiable rim starting and ending NE1/4 NE1/4 and starts in the N1/2 NE1/4 NE1/4 and ends in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the N1/2 NW1/4 NW1/4
10 of 17	32	42	W. M.	2	R. Rim	Traverses identifiable rim starting and ending S1/2 SE1/4 SE1/4 and starts in S1/2 SW1/4 SE1/4 and ends in the W1/2 NW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
				3	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the S1/2 SW1/4 SW1/4 and starts and ends in SW1/4 SW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting and ending in the S1/2 SE1/4

			10	R. Rim	Traverses identifiable rim starting and ending in the N1/2 NW1/4 NW1/4
				L. Rim	Traverses identifiable rim starting at the north quarter corner of section 10 to the southeast corner of the SE1/4 NE1/4 NW1/4 thence west along subdivision line and ending at the southwest corner of the SW1/4 NW1/4 NW1/4
			9	L. Rim	Traverses identifiable rim starting in the southeast corner of the SE1/4 NE1/4 NE1/4 and ending in the N1/2 NW1/4 NW1/4
			4	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
				L. Rim	Traverses identifiable rim starting and ending in the S1/2 SW1/4 SW1/4
10 of 32 17	42	W. M.	5	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the W1/2 NW1/4 SW1/4
				L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NW1/4 SW1/4
			6	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in lot 12
				L. rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending at southwest corner of the SW1/4 SE1/4 thence north to the northeast corner of lot 60 thence west to the southwest corner of lot 49 thence north to the northwest corner of lot 49 thence west to the southwest corner of lot 44 thence north to the northwest corner of lot 44 thence west to the southwest corner of lot 38 thence north to the northwest corner of the S1/2 SW1/4 of lot 11
					End of boundary at China Gulch
12 of 31 17	41	W. M.	9	R. Rim	Traverses identifiable rim starting in the S1/2 NE1/4 NE1/4 and ending in the N1/2NW1/4NE1/4
				L. Rim	Traverses identifiable rim starting in the S1/2 NW1/4 NW1/4 and ending in the N1/2 NE1/4 NW1/4
			4	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 lot 2
				L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 lot 3
30	41	W. M.	33	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in W1/2 SW1/4 NW1/4
				L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 SW1/4

			32	L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending on south boundary of NW1/4 NW1/4 SE1/4 thence west to the southwest corner of the NW1/4 NW1/4 SE1/4 thence north to center of section 32 thence west to identifiable rim on south boundary of SE1/4 SW1/4 NW1/4 and to the west boundary of NW1/4 SW1/4 NW1/4 thence north ending at section corner common to section 29, 30, 31 and 32.
				R. Rim	Traverses identifiable rim starting and ending in the NE1/4
			29	R. Rim	Traverses identifiable rim starting and ending in the SE1/4
				L. Rim	Starting at common section to sections 29, 30, 31, and 32 north to identifiable rim on west boundary located in the NW1/4 SW1/4 SW1/4, thence along rim and ending in the E1/2 SE1/4 NE1/4
12 of 30 17	41	W. M.	28	R. Rim	Traverses identifiable rim starting in the W1/2 NW1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
				L. Rim	Traverses identifiable rim starting and ending in the W1/2 NW1/4
			21	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
				L. Rim	Traverses identifiable rim starting and ending in the W1/2 SW1/4 SW1/4 and starting and ending in the N1/2 NW1/4
			20	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the E1/2 SE1/4 NE1/4
			16	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 SW1/4 NW1/4
				L. Rim	Traverses identifiable rim starting and ending in the W1/2 SW1/4
			17	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the N1/2 NE1/4 NW1/4
				L. Rim	Traverses identifiable rim starting in the E1/2NE1/4SE1/4 and ending in the N1/2 NW1/4 NW1/4
			8	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 NE1/4 NE1/4
				L. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
12 of 30 17	41	W. M.	7	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NE1/4

			6	L. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4
			5	R. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4
				L. Rim	Traverses identifiable rim starting in the W1/2 SW1/4 SW1/4 and ending in lot 2
			4	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in lot 4
29	41	W. M.	33	R. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
			32	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
				L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the W1/2 NW1/4 SW1/4
12 & 13 of 17			31	R. Rim	Traverses identifiable rim starting in the E1/2SE1/4 NE1/4 and ending in the N1/2 NE1/4 NE1/4
				L. Rim	Traverses identifiable rim starting in the SE1/4 NE1/4 SE1/4 thence to north center of SE1/4 NE1/4 SE1/4 thence west to southwest corner of the NW1/4 NW1/4 SE1/4 thence north to northwest corner of NW1/4 SW1/4 NE1/4 thence along identifiable rim ending in the N1/2 NE1/4 NW1/4
13 of 17	29	W. M.	30	R. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4
				L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the E1/2 NE1/4 SE1/4
			29	R. Rim	Traverses identifiable rim starting in the W1/2 SW1/4 SW1/4 and ending in the E1/2 SE1/4 NE1/4
				L. Rim	Traverses identifiable rim starting in the W1/2 NW1/4 SW1/4 and ending in the N1/2 NW1/4 NE1/4
			28	R. Rim	Traverses identifiable rim starting and ending NW1/4
			20	L. Rim	Traverses identifiable rim starting and ending in the SE1/4
			21	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending at east quarter corner and starts E1/2 SE1/4 NE1/4 and ends on the north boundary of the NW1/4 NE1/4 NE1/4, thence west to the northwest corner of the NW1/4 NE1/4

					NE1/4
				L. Rim	Traverses identifiable rim starting in the W1/2 NW1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
			22	R. Rim	Starts at west quarter corner and ends on the west boundary of the NW1/4 SW1/4 NW1/4
			16	R. Rim	Starts at the southwest corner of SE1/4 SE1/4, north to northwest corner of the NE1/4 NE1/4 thence east ending at section corner common to sections 9, 10, 15, and 16
				L. Rim	Traverses identifiable rim starting and ending in the W1/2
13 of 29 17	41	W. M.	9	R. Rim	Starts at the section corner common to sections 9, 10, 15, and 16 and ends at section corner common to section 3, 4, 9, and 10
				L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending at the northwest corner of the NE1/4 NE1/4
			3	R. Rim	Traverses identifiable rim starting at the section corner common to sections 3, 4, 9, 10 and ending in the southwest corner of the NW1/4 NW1/4 SW1/4 thence north along northsouth section line common to section 3 and 4 to township line between T. 29 S., and T. 28 S.
			4	L. Rim	Traverses identifiable rim starting at the southeast corner of the SW1/4 SE1/4 and ending on the west boundary line of NW1/4 NW1/4 SW1/4 at 3400 ft. elevation thence north on section line to elevation line 3600 ft ending at 3600 ft elevation line on the west boundary of lot 21
			5	L. Rim	Starts at 3600 ft. elevation line in the northeast quarter of lot 24 and ends on the 3600 ft elevation line on the west boundary of the northwest quarter of lot 23 thence north to the northwest corner of the southwest quarter of lot 18 thence west to northwest corner of the southwest quarter of lot 20 thence north along section line between section 5 and 6 and ending at the northwest corner of the southwest quarter of lot 12
13 of 29 17	41	W. M.	6	L. Rim	Starting at the northeast corner of the southeast quarter of lot 13 thence west to the southwest corner of the northwest quarter of lot 14 thence north to the township line at the northwest corner of lot 2

13 of 17	28	41	W. M.	32 L. Rim	Starting at the southwest corner of section 32 thence north along section line between sections 31 and 32 section corner common to sections 29, 30, 31, and 32 thence east ending at the northeast corner of the NE1/4 NW1/4
				34 R. Rim	Starting at the section corner between section 3 and 4 of the township line between T. 29 S., and T. 28 S., thence west along township line to south section corner of section 34 thence north to northeast corner of NE1/4 SW1/4 thence west to the southwest corner of SW1/4 NW1/4 SW1/4 thence north along section line between sections 33 and 34 to section corner common to section 33, 34, 27, and 28
				28 R. Rim	Starting at the section corner common to sections 33,34, 27, and 28 north to east quarter corner of section 28 thence west to the southwest corner of the SW1/4 SE1/4 NE1/4 thence north ending at the northwest corner of the NW1/4 NE1/4 NE1/4
				29 L. Rim	Starting at the southeast corner of the SE1/4 SW1/4 SW1/4 thence north to the northwest corner of the NW1/4 NE1/4 SW1/4 thence east to the northeast corner of the NE1/4 NE1/4 SW1/4 where it intersects the identifiable rim and traverses to the north boundary line of the NW1/4 NE1/4 NE1/4 thence east and ending at section common to sections 20, 21, 28, and 29.
13&14 28 17		41	W. M.	21 R. Rim	Traverses elevation line 3300 ft. starting at the southwest corner of the SW1/4 SE1/4 SE1/4 to the north boundary line of the NW1/4 NE1/4 SE1/4 SE1/4 thence east ending at the east quarter corner of section 21
				L. Rim	Starting at the section corner common to sections 21, 20, 28, and 29 thence east to the southeast corner of the SE1/4 SW1/4 SW1/4 and intersects 3400 ft elevation line and traverses elevation line and ending on the north boundary of the N1/2 NW1/4 NE1/4
14 of 17				22 R. Rim	Starting at the west quarter corner of section 22 east along division line to southeast corner of the SE1/4 SW1/4 NW1/4 thence north along identifiable rim ending at the northeast corner of the NE1/4 NW1/4 NW1/4
				16 L. Rim	Traverses elevation line 3300 ft starting in

					the S1/2 SW1/4 SE1/4 and ending E1/2 NE1/4 SE1/4
			15	R. Rim	Traverses identifiable rim starting at the southeast corner of the SE1/4 SW1/4 SW1/4 and ending at the E1/2 NE1/4 SE1/4
				L. Rim	Traverses elevation line 3300 ft starting in the W1/2 NW1/4 SW1/4 and ending at the E1/2 SE1/4 NE1/4 thence north along section line and ending in the northeast corner of the NE1/4 SE1/4 NE1/4
			14	R. Rim	Traverses identifiable rim starting at the W1/2 NW1/4 SW1/4 and ending in the E1/2 NE1/4 SE1/4 and starting and ending in the E1/2 NE1/4
				L. Rim	Traverses elevation line 4100 ft starting at the northwest corner of the NW1/4 SW1/4 NW1/4 and ending at the north boundary line of the N1/2 NE1/4 NW1/4
			13	R. Rim	Traverses identifiable rim starting at the NW1/4 NW1/4 SW1/4 and ending in the SW1/4 SW1/4 NW1/4
			11	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the E1/2 SE1/4 NE1/4
				L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
14 of 28 17	41	W. M.	12	R. Rim	Traverses identifiable rim starting and ending in the W1/2 NW1/4
			2	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in lot 2
			1	R. Rim	Traverses, identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in lot 3
27	41	W. M.	36	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in the E1/2 SE1/4 NE1/4
			35	L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 NE1/4 NE1/4
			26	L. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4 SE1/4
			25	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the E1/2 SE1/4 NE1/4
				L. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4 and starting at the southwest corner of the SW1/4 NW1/4 SW1/4 along

					north-south section line to the northwest corner of NW1/4 SW1/4 NW1/4 thence east to the southeast corner of the SW1/4 NE1/4 NW1/4 thence, north to section line at northwest corner of NE1/4 NE1/4 NW1/4, thence east along section line and ending at east corner of NE1/4 NW1/4 NE1/4
14 of 27 17	41	W. M.	24	R. Rim	Starting at the southwest corner of the SW1/4 SE1/4 SE1/4 thence north to northwest corner of the NW1/4 SE1/4 SE1/4 thence east ending at northeast corner of the NE1/4 SE1/4 SE1/4
14&15 of 17	27	42 W. M.	19	L. Rim	Starting at the northwest corner of lot 4 thence along subdivision line east ending at the northeast corner of the NE1/4 SE1/4 SE1/4
			30	R. Rim	Traverses identifiable rim starting in lot 2 and ending on the south boundary of the NE1/4 SE1/4 NW1/4 thence east leaving rim at elevation line 3600 ft to a point at the northeast corner of the NW1/4 NW1/4 SE1/4 thence east along subdivision line to east quarter corner of section 30
15 of 17			20	L. Rim	Starts at the west quarter corner thence east to center of section 20 thence north, to the northwest corner of the SW1/4 SW1/4 NE1/4 thence east to northeast corner of the SE1/4 SE1/4 NE1/4 thence south ending at the east quarter corner
			29	R. Rim	Starts at the west quarter corner and ending at the east quarter corner
			28	R. Rim	Starts at the west quarter corner thence east to center of section 28 thence south to the southwest corner of the SW1/4 NW1/4 SE1/4 thence east ending at the southeast corner of the SE1/4 NE1/4 SE1/4
			21	L. Rim	Starts at the west quarter corner and ends at the east quarter corner
			22	L. Rim	Starts at the west quarter corner thence east to center of section 22 thence north to the northwest corner of the NW1/4 SW1/4 NE1/4 thence east ending at the northeast corner of the NE1/4 SE1/4 NE1/4
15 of 27 17	42	W. M.	27	R. Rim	Starts at the southwest corner of the SW1/4 NW1/4 SW1/4 thence east to the southeast corner

					of the SE1/4 NE1/4 SE1/4 thence north along section line ending at the section corner common to sections 22, 23, 26, and 27
			26	R. Rim	Starts at the section corner common to sections 22, 23, 26, and 27 thence east ending at identifiable rim, then traverses identifiable starting in the NE1/4 NW1/4 NW1/4 and ending in the N1/2 NW1/4 NE1/4 and starting and ending in the NE1/4 NE1/4
			23	R. Rim	Traverses identifiable rim starting and ending in the S1/2 SW1/4 SW1/4 and starting and ending S1/2 SE1/4
				L. Rim	Starts at the northwest corner of the NW1/4 SW1/4 NW1/4 thence east along subdivision line east to the northeast corner of the NE1/4 SE1/4 NE1/4 thence south along section line ending at the 3900 ft elevation line
			24	L. Rim	Starts in the W1/2 SW1/4 NW1/4 on the 3800 ft elevation line and ends on identifiable rim at the northeast corner of the NW1/4 NE1/4 SW1/4 on the 3400 ft elevation line to identifiable rim in S1/2 SE1/4 SW1/4 starts and ends in the E1/2 SW1/4 at 3400 ft elevation line
			25	L. Rim	Traverses identifiable rim at 3400 ft elevation starting and ending in the N1/2 N1/2
15 of 27 17	42	W. M.	25	R. Rim	Starts at the northwest corner of the NW1/4 SW1/4 NW1/4 thence south along section line to west quarter corner of section 25 thence east along subdivision line east quarter corner thence north on range line ending at west quarter corner section 19
15 of 27 17	43	W. M.	19	R. Rim	Start at the west quarter corner thence east to the southeast corner of lot 7 thence north ending at the northeast corner of lot 3
15&16 27 of 17	43	W. M.	18	R. Rim	Starts at the southwest corner of lot 19 thence north to northwest corner of south half of lot 13 thence east to the southeast corner of the SE1/4 NE1/4 SE1/4 thence north along section line between Sections 17 and 18 ending at the section corner common to section 7, 8, 17 and 18.
				L. Rim	Starts at the 3300 ft elevation line at the northwest corner of lot 16 and along

					identifiable rim and ends at 3200 ft elevation line at middle west line of lot 7 thence north along section line ending at section corner common to sections 7 and 18 on range line
15 of 17			7	L. Rim	Starts at the section corner common to sections 7 and 8 on range line thence north to northwest corner of lot 17 thence east to southeast corner of lot 16 thence north to the northwest corner of lot 15 thence east to southeast corner of lot 7 of section 7 thence north to northeast corner of lot 4 of section 7 thence east along sec. line ending at northeast corner of lot 3
				R. Rim	Starts at section corner common to sections 7, 8, 17 and 18 thence north along section line to section corner common to section 5 & 6, 7 and 8
15&16 of 17	27	43 W. M.	6	L. Rim	Starts at the southwest corner of the lot 49 thence north to the northwest corner of lot 49 thence east to southeast corner of lot 42 thence north to the northwest corner of lot 41 thence east to the southeast corner of lot 38 thence north to the northeast corner of lot 29 thence west to the southwest corner of lot 25 thence north to the northwest corner of lot 25 thence west to the southwest corner of lot 17 thence north to the northwest corner of lot 3 on township line thence west to and ending at the southwest corner of the SE1/4 SE1/4 of Sec. 31 of T. 26 S., R. 43 E
16 & 17 of 17			5	R. Rim	Starts at section corner common to sec.5, 6, 7 and 8 thence east to south quarter corner of sec. 5 thence north to the northwest corner of lot 24 thence west to the southwest corner of lot 20 thence north to the northeast corner of lot 12 thence west to the southwest corner of the southeast quarter of lot 13 thence north to the northwest corner of the southeast quarter of lot 1 on township line thence east to the southwest corner of the SW1/4 SE1/4 of sec. 32 T. 26 S., R. 43 E.
17 of 26 17		43 W. M.	32	R. Rim	Starts at the southwest corner of the SW1/4 SE1/4 thence north to the southwest corner of lot 8 thence east to the southeast corner of lot 8 thence north to the northeast corner of lot 8 thence east to east quarter corner of sec. 32 thence north along section line between

					32 and 33 to section corner common to 28, 29, 32 and 33
			31	L. Rim	Starts at southwest corner of the SE1/4 SE1/4 of sec 31 thence north to northwest corner of the SE1/4 NE1/4 of sec. 31 thence east to the northeast corner of the SE1/4 NE1/4 ending
17 of 26 17	43	W. M.	32	L. Rim	Starts at northwest corner of lot 6 thence east to the southeast corner of the west half of lot 4 thence north to the northeast corner of the west half of lot 4 ending on sec line
17 of 26 17	43	W. M.	29	L. Rim	Starts at the southwest corner of the east half SE1/4 SW1/4 thence north to the northwest corner of the east half of the NE1/4 SW1/4 thence east to the northeast corner of the east half NE1/4 SW1/4 thence north to the northeast corner of the NE1/4 NW1/4 thence east to the northwest corner of lot 1 on sec line
			28	R. Rim	Start at the section corner common to 28, 29, 32 and 33 thence north to the northwest corner of the SW1/4 NW1/4 SW1/4 thence east to the northeast corner of the SW1/4 NW1/4 SW1/4 thence north to the northwest corner of the NE1/4 SW1/4 NE1/4 thence east to the southeast corner of the SW1/4 NE1/4 NW1/4 thence north to the northeast corner of the NW1/4 NW1/4 NW1/4 ending on section line
17 of 26 17	43	W. M.	21	R. Rim	Starts at the southwest corner of the SE1/4 SE1/4 SW1/4 thence north to the northwest corner of the NE1/4 SE1/4 SW1/4 thence east to the northeast corner of NE1/4 SE1/4 SW1/4 thence north to the northwest corner of NW1/4 SE1/4 thence east to the northeast corner of the NE1/4 SE1/4 thence north to the northeast corner of the NW1/4 NE1/4 ending on sec. line
				L. Rim	Starts at the southwest corner of the NW1/4 NW1/4 thence east to the southeast corner of the W1/2 NW1/4 NW1/4 thence north to the northeast corner of W1/2 NW1/4 NW1/4 thence east on sec line ending at the northeast corner of the NW1/4 NW1/4
17 of 17			20	L. Rim	Start at south quarter corner of sec. 20 thence east on sec. line to the southeast corner of the SW1/4 SE1/4 thence north on subdivision line to northwest corner of the SE1/4 NE1/4 thence east ending at northeast corner of SE1/4

					NE1/4
			16	R. Rim	Starts at the southwest corner of the SE1/4 SE1/4 thence north to the northwest corner of the SE1/4 NE1/4 thence east to the northeast corner SE1/4 NE1/4 thence north on section line to corner common to sections 9, 10, 15 and 16 ending
				L. Rim	Starts at the southeast corner of the SW1/4 SW1/4 thence north to the northeast corner of the NW1/4 NW1/4 ending
			9	L. Rim	Starts at the southwest corner of the SE1/4 SW1/4 thence north to the northwest corner of the NE1/4 SW1/4 thence east to the southeast corner of the SW1/4 NE1/4 thence north to the northeast corner of the SW1/4 NE1/4 thence east and ending at the southeast corner of the NE1/4 NE1/4
17 of 26 17	43	W. M.	9/10		The Owyhee Wild River Administrative Boundary terminates on the north/south section line between secs. 9 and 10 and described as starting at corners common to sec. 9, 10, 15 and 16 thence north along section line to the southeast corner of the NE1/4 NE1/4 ending.

APPENDIX B

LEGAL DESCRIPTIONS OF PROPOSED ADMINISTRATIVE BOUNDARIES WEST LITTLE OWYHEE RIVER

MAP NO.	TOWNSHIP	RANGE	MERIDIAN	SECTION	DESCRIPTION
1 of 8	36S	47E	W.M.	16	Beginning at the NE corner of the SE of SW, thence west to the NE corner of the SW of SW. Thence southwest to the SW corner of the township.
1 of 8	36S	47E	W.M.	20	Thence in a southwesterly direction to SW corner of SE of NE. Thence to the center of the SE 1/4. Thence to the SE corner of the township.
1 of 8	36S	47E	W.M.	29	Thence south approximately 0.25 mile along the east section line of the NE of NE. Thence southwesterly to the center of the SE of NE. Thence southeasterly to the SE corner of the SE of NE. Thence south to the SE corner of the NE of SE.
1 of 8	36S	47E	W.M.	28	Thence in a southeasterly direction to the southeast corner of the SW of SW.
1 of 8	36S	47E	W.M.	33	Thence southeasterly to the center of the NE of NW. Thence southeasterly to the center of the NE of NW. Thence southeasterly to the southwest corner of the SW of NW.
1 of 8	36S	47E	W.M.	32	Thence west to the center of sec. 32. Thence southeasterly to the center of the SW of SE. Thence southeasterly to the SE corner of the SW of of SE.
1 of 8	37S	47E	W.M.	5	Thence south to the center of the NE 1/4. Thence southwesterly to the center of the NW of SE. Thence southwesterly to the SW corner of the SE of SW.
1 of 8	37S	47E	W.M.	8	Thence southwesterly to the SW corner of the NW of NW.

1, 2 & 3 of 8	37S	47E	W.M.	7	Thence southwesterly to the center of the SE of NE. Thence westerly along the identifiable west rim through the SE of NE, SW of NE, SE of NW, SW of NE, NW of SE, NE of SW, SE of SW, SW of SE, NW of SE, SW of SE, SE of SE, and NE of SE to a point intersecting the North-South (NS) section line between secs. 7 and 8.
2 of 8	37S	47E	W.M.	8	Thence easterly along the identifiable west rim through the NW of SW, and SW of SW to a point intersecting the NS section line between secs. 7 and 8.
2 of 8	37S	47E	W.M.	7	Thence along the identifiable rim through the SE of SE to a point intersecting the East-West (EW) section line between secs. 7 and 18.
2 & 3 of 8	37S	47E	W.M.	18	Thence along the identifiable rim through the NE of NE, and SW of NE to the center of the SE of NE. Thence in a southwesterly direction to the SW corner of the SW of SE. Thence west along EW section line between secs. 18 and 19.
3 of 8	37S	47E	W.M.	19	Thence south 1.00 mile along the center line of the W 1/2 to the EW section line between secs. 19 and 30.
3 of 8	37S	47E	W.M.	30	Thence west to the identifiable rim. Thence southwesterly through the NW of NW, and SW of NW to the NS section line between secs. 30 (T37S, R47E, W.M. Meridian (WM) and sec 25 (T37S, R46E, WM).
3 of 8	37S	46E	W.M.	25	Thence south along the identifiable rim through the SE of NE, NE of SE, and SE of SE to the SE corner of the township.
3 of 8	37S	46E	W.M.	31	Thence southerly through the NW of NW, SW of NW, and NW of SW to the NS section line between secs. 31 (T37S, R47E, WM) and 36 (T37S, R46E, WM).

3 of 8	37S	46E	W.M.	36	Thence southwesterly along the identifiable rim through the NE of SE, and SE of SE to a point intersecting the NS section line between secs. 31 (T37S, R47E, WM) and 36 (T37S, R46E, WM).
3 of 8	37S	46E	W.M.	31	Thence southeasterly along the identifiable rim through the SW of SW to a point intersecting the EW section line between secs. 31 (T37S, R47E, WM) and 6 (T38S, R47E, WM).
2 & 3 of 8	37S	47E	W.M.	6	Thence southeasterly to the center point of the E 1/2 of the township. Thence along the identifiable rim through the SE of NE, and NE of SE to a point intersecting the NS section line between secs. 5 and 6.
2 of 8	38S	47E	W.M.	5	Thence southerly along the identifiable rim through the NW of SW, SW of SW, and SE of SW to a point intersecting the EW section line between secs. 5 and 8.
2 of 8	38S	47E	W.M.	8	Thence southeasterly along the identifiable rim through the NW of NE, NE of NE, SE of NE, and NE of SE to the southeast corner of the NE of SE.
2 of 8	38S	47E	W.M.	9	Thence southeasterly to the center of SW of SW. Thence south 0.13 mile to a point intersecting the EW section line between secs. 9 and 16.
2 of 8	38S	47E	W.M.	16	Thence south to the center of SW of NW. Thence southwesterly to the SW corner of SW of NW.
2 of 8	38S	47E	W.M.	17	Thence southwesterly to the SW corner of NE of SE. Thence west to the SW corner of NW of SE. Thence southwesterly to the center of SE of SW. Thence west to the center of the SW of SW. Thence southwesterly to the SW corner of the township.
2, 3 & 4 of 8	38S	47E	W.M.	19	Thence southwesterly to the center of the township. Thence south to the NE corner of the SE of SW.

					Thence southwesterly to the center of the SE of SW. Thence southwesterly along the identifiable rim to a point intersecting the EW section line between secs. 19 and 30.
4 of 8	38S	47E	W.M.	30	Thence southerly along the identifiable rim through the NE of NW, SE of NW, NW of SW, and SW of SW to a point intersecting the EW section line between secs. 30 and 31.
4 of 8	38S	47E	W.M.	31	Thence southerly along the identifiable rim through the NW of NW, SW of NW, NW of SW, and SW of SW to the section line between secs. 31 (T38S, R47E, WM) and 6 (T39S, R47E, WM).
4 of 8	39S	47E	W.M.	6	Thence southerly along the identifiable rim through the NW of NW, SW of NW, NW of SW, NE of SW, SE of SW, and SW of SW to the SE corner of the SW of SW.
4 of 8	39S	47E	W.M.	7	Thence southeasterly to the center of the NE of NW. Thence to the center of the SE of NW. Thence southwesterly to the NW corner of the SW of SW. Thence south to the SW corner of the township.
4 of 8	39S	47E	W.M.	13	Thence south to the NE corner of the SE of NE. Thence to the center of SE of NE. Thence to the center of the township. Thence west to the NW corner of the NW of SW. Thence south, across Bobs Draw Creek, to the SW corner of the NW of SW. Thence east to the center of the SW 1/4. Thence south to the SE corner of the SW of SW.
4 of 8	39S	46E	W.M.	24	Thence southwesterly to the NW corner of the SW of NW. Thence south across an unnamed creek to the SW corner of the SW of NW. Thence southeasterly across an unnamed creek to the center of the NW of SW. Thence south to a point intersecting

					the EW section line between secs. 24 and 25.
4 of 8	39S	46E	W.M.	25	Thence southwesterly to the SW corner of the NW of NW.
4 of 8	39S	46E	W.M.	26	Thence southwesterly to the identifiable rim of Dry Canyon Creek. Thence northwesterly along the identifiable rim through the SE of NE, SW of NE, and NW of NE to the NS center line of the township. Thence south across Dry Canyon Creek to the identifiable rim. Thence southeasterly along the identifiable rim through the SW of NE, NW of SE, NE of SW, and NW of SE to the center of the NW of SE. Thence southeasterly to the SE corner of the township.
4 of 8	39S	46E	W.M.	35	Thence south to the SE corner of the NE of NE. Thence west to the center of the NE 1/4. Thence southwesterly to the center of the SW of NE. Thence west to the NS section line between secs. 34 and 35.
4 of 8	39S	46E	W.M.	34	Thence southwesterly to the center of the township. Thence west to the NE corner of the NW of SW. Thence southwesterly to the SW corner of the NW of SW.
4 of 8	39S	46E	W.M.	33	Thence west to the center of the SE 1/4. Thence southwesterly to the SW corner of the SW of SE.
4 of 8	40S	46E	W.M.	4	Thence southwesterly to the center of the west 1/2. Thence west to the NW corner of the NW of SW.
4 & 5 of 8	40S	46E	W.M.	5	Thence southwesterly to the center of the SE 1/4. Thence west to the NW corner of the SW of SW.
5 of 8	40S	46E	W.M.	6	Thence west to the center of the SE 1/4. Thence southeasterly to the SE corner of the township.

5 of 8	40S	46E	W.M.	7	Thence south to the NW corner of the SE of NW. Thence southwesterly to the center of the east 1/2. Thence south to the center of the SE 1/4. Thence east to the SE corner of the NE of SE.
5 of 8	40S	46E	W.M.	8	Thence northeasterly to the center of the NW of NE. Thence east to the center of the NE of NE. Thence northeasterly to the NE corner of the township.
5 of 8	40S	46E	W.M.	9	Thence southeasterly to the center of the NW 1/4. Thence southwesterly to the NW corner of the NW of SW. Thence south to the SW corner of the township.
5 of 8	40S	46E	W.M.	16	Thence southeasterly to the center of the NE of NW. Thence southeasterly to the NE corner of the SE of NW. Thence south to the center of the township. Thence southwesterly to the center of the SE of SW. Thence southwesterly to the SW corner of the SE of SW.
5 of 8	40S	46E	W.M.	21	Thence southwesterly to the NW corner of the SW of NW.
5 of 8	40S	46E	W.M.	20	Thence southwesterly to the center of the NE of SE. Thence southwesterly to the SW of SW. Thence southwesterly to the SW corner of the township.
5 & 6 of 8	40S	46E	W.M.	30	Thence southwesterly to the center of the NE of NE. Thence west to the center of the NE of NW. Thence northwesterly to the NW corner of the NE of NW.
5 & 6 of 8	40S	46E	W.M.	19	Thence northwesterly to the NW corner of the SW of SW.
6 of 8	40S	45E	W.M.	24	Thence northwesterly to the center of the east 1/2. Thence NW to the center of the NW of NE. Thence southwesterly to the center of the SE of NW. Thence east to the section line between secs. 23 and

					24.
6 of 8	40S	45E	W.M.	23	Thence west to the center of the SW of NE. Thence northwesterly to the NW corner of the NE of NW. Thence south to the center of the NW 1/4. Thence northwesterly to the NW corner of the SW of NW. Thence southwesterly to the center of the SW of NW.
6 of 8	40S	45E	W.M.	22	Thence northwesterly to the NW corner of the NE of NE. Thence south to the center of the E 1/2. Thence along the identifiable rim through the NW of SE, SW of SE, SE of SW, NE of SW, and NW of SW to a point on the section line between secs. 21 and 22.
6 of 8	40S	45E	W.M.	21	Thence along the identifiable rim through the NE of SE, NW of SE, SW of NE, SE of NW, NE of NW, and NW of NW to the section line between secs. 16 and 21.
6 of 8	40S	45E	W.M.	16	Thence northwesterly along the identifiable rim through the SW of SW to the NW corner of the SW of SW.
6 of 8	40S	45E	W.M.	17	Thence westerly along the identifiable rim through the NE of SE and SE of SE to the section line between secs. 17 and 20.
6 of 8	40S	45E	W.M.	20	Thence along the identifiable rim through the NE of NE, NW of NE, and NE of NW to the center of the NE of NW. Thence northwesterly to the NW corner of NE of NW.
6 of 8	40S	45E	W.M.	17	Thence northwesterly to the NW corner of the SW of SW.
6 of 8	40S	45E	W.M.	18	Thence northwesterly to the NW corner of the NE of NW.
6 of 8	40S	45E	W.M.	7	Thence northwesterly to the NW corner of the SW of SW.
6 & 7 of 8	40S	44E	W.M.	12	Thence west to the center of the SE 1/4. Thence northwesterly to the

					center of the township. Thence west to the SW corner of the SW of NW.
7 of 8	40S	44E	W.M.	11	Thence northwesterly to the center of the NE 1/4. Thence west to the center of the N 1/2. Thence southwesterly to the SW corner of the NW of SW.
7 of 8	40S	44E	W.M.	10	Thence southwesterly to the SW corner of the SE of SE. Thence west to the SW corner of the SW of SE.
7 of 8	40S	44E	W.M.	15	Thence south across the Upper West Little Owyhee River to the center of the township. Thence east to the center of the east 1/2. Thence northeasterly to the NE corner of the SE of NE.
7 of 8	40S	44E	W.M.	14	Thence northeasterly to the NE corner of the NW of NW.
7 of 8	40S	44E	W.M.	11	Thence northeasterly to the center of the S 1/2. Thence east to the SE corner of the NE of SE.
7 of 8	40S	44E	W.M.	12	Thence east to the center of the SW 1/4. Thence southeasterly to the SE corner of the SE of SW. Thence east to the SE corner of the SW of SE.
6 of 8	40S	44E	W.M.	13	Thence southeasterly to the NE corner of the SE of NE.
6 of 8	40S	45E	W.M.	18	Thence southeasterly to the SE corner of the SW of SE.
6 of 8	40S	45E	W.M.	19	Thence southeasterly to the SE corner of the NE of NE.
6 of 8	40S	45E	W.M.	20	Thence southeasterly to the center of the SW of NW. Thence east to the center of the SE of NW. Thence northeasterly to the center of the NE 1/4. Thence east to the SE corner of the NE of NE. Thence north to the identifiable rim of the West Little Owyhee River.

6 of 8	40S	45E	W.M.	21	Thence southeasterly along the identifiable south rim through the NW of NW, SE of NW, NE of SW, NW of SE, SW of SE, and SE of SE to to a point intersecting the NS section line between secs. 21 and 22.
6 of 8	40S	45E	W.M.	22	Thence along the identifiable south rim through the SW of SW to a point intersecting the EW section line between secs. 22 and 27.
6 of 8	40S	45E	W.M.	27	Thence along the identifiable rim through the NW of NW, NE of NW, and the NW of NE to a point intersecting the EW section line between secs. 22 and 27.
6 of 8	40S	45E	W.M.	22	Thence along the identifiable rim through the SW of SE, and SE of SE to a point intersecting the NS section line between secs. 22 and 23.
6 of 8	40S	45E	W.M.	23	Thence along the identifiable rim through the SW of SW to the center of the SW 1/4. Thence to the center of the SE of SW. Thence to the center of the SW of SE. Thence to the SE corner of the NE of SE.
6 of 8	40S	45E	W.M.	24	Thence east to the center of the south 1/2. Thence to the SW corner of the SW of SE.
6 of 8	40S	45E	W.M.	25	Thence southeasterly to the center of the NW of NE. Thence southeasterly to the SE corner of the NE of NE.
5 & 6 of 8	40S	46E	W.M.	30	Thence southeasterly to the center of the township. Thence southeasterly to the center of the NW of SE. Thence northeasterly to the center of the SE of NE. Thence to a point intersecting the NS section line between secs. 29 and 30.
5 of 8	40S	46E	W.M.	29	Thence east to the center of the SW of NW. Thence northeasterly to the NE corner of the NE of NW. Thence

					east to the NE corner of the township. Thence southerly along the identifiable west rim of Jack Creek through the NE of NE, NW of NE, SW of NE, SE of NW, NE of SW, NW of SE, SW of NE, and SE of NE to a point intersecting the NS section line between secs. 28 and 29.
5 of 8	40S	46E	W.M.	28	Thence easterly along the identifiable rim of Jack Creek through the NW of NW, SW of NW, SE of NW, SW of NW, and NW of NW to a point intersecting the EW section line between secs. 21 and 28.
5 of 8	40S	46E	W.M.	21	Thence along the identifiable east rim of Jack Creek through the SW of SW, and SE of SW to the center of the SE of SW. Thence north to the center of the SE of NW. Thence northeasterly to the NE corner of the NW of NE.
5 of 8	40S	46E	W.M.	16	Thence north to the center of the SE 1/4. Thence northeasterly to the NE corner of the SE of NE. Thence northwesterly to the NW corner of the NE of NE.
5 of 8	40S	46E	W.M.	9	Thence northwesterly to the center of the S 1/2. Thence north to the center of the township. Thence northeasterly to the center of the SW of NE. Thence north to a point intersecting the EW section line between secs. 4 and 9.
5 of 8	40S	46E	W.M.	4	Thence north to the center of the SW of SE. Thence northeasterly to the center of the NE of SE. Thence east to a point intersecting the NS section line between secs. 3 and 4.
4 & 5 of 8	40S	46E	W.M.	3	Thence east to the center of the NW of SW. Thence northeasterly to the center of the NW of NE. Thence north to a point intersecting the EW section line between secs. 3 (T40S, R46E, WM) and 34 (T39S, R46E, WM).
4 of 8	39S	46E	W.M.	34	Thence north to the center of the SW

					of SE. Thence northeasterly to the NE corner of the SE of SE.
4 of 8	39S	46E	W.M.	35	Thence east to the NE corner of the SE of SE.
4 of 8	39S	46E	W.M.	36	Thence northeasterly to the center of the W 1/2. Thence northeasterly to the center of the NE of NW. Thence northwesterly to the NW corner of the NE of NW.
4 of 8	39S	46E	W.M.	25	Thence north to the center of the SW 1/4. Thence northeasterly to the NE corner of the NE of NW.
4 of 8	39S	46E	W.M.	24	Thence northeasterly to the center of the SW of SE. Thence northerly along the identifiable east rim of the West Little Owyhee River to the NE corner of the township.
4 of 8	39S	47E	W.M.	18	Thence northeasterly to the center of the SW of SW. Thence north to the center of the SW of NW. Thence northeasterly to the NE corner of the NE of NW.
4 & 8 of 8	39S	47E	W.M.	7	Thence northeasterly to the center of the SW of SE. Thence north to the center of the SW of NE. Thence southeasterly along the identifiable rim of an unnamed tributary through the SW of NE and NE of SE across an unnamed tributary at the confluence of three unnamed drainages. Thence through the SE of NE and NW of NE to a point intersecting the EW section line between secs. 6 and 7.
4 of 8	39S	47E	W.M.	6	Thence along the east identifiable rim through the SW of SE, SE of SW, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 6 (T39S, R47E, WM) and 31 (T38S, R47E, WM).
4 of 8	38S	47E	W.M.	31	Thence northerly along the east identifiable rim through the SE of SW, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 30 & 31.

4 & 8 of 8	38S	47E	W.M.	30	Thence northerly along the identifiable rim through the SE of SW, NE of SW, SE of NW, SW of NE, and NW of NE to a point intersecting the EW section line between secs. 19 and 30. Thence east to the NE corner of the NW of NE.
2 & 8 of 8	38S	47E	W.M.	19	Thence northeasterly to the center of the NE of SE. Thence northeasterly to the NE corner of the NE of SE.
2 of 8	38S	47E	W.M.	20	Thence northeasterly along the identifiable rim through the SW of NW, NW of NW, NE of NW, SE of NW, SW of NE, NW of NE, NE of NW, and NW of NE to a point intersecting the EW section line between secs. 17 and 20.
2 of 8	38S	47E	W.M.	17	Thence along the identifiable rim through the SW of SE to a point intersecting the EW section line between secs. 17 and 20.
2 of 8	38S	47E	W.M.	20	Thence easterly along the identifiable rim through the NW of NE and NE of NE to a point intersecting the EW section line between secs. 17 and 20.
2 of 8	38S	47E	W.M.	17	Thence northeasterly along the identifiable rim through the SE of SE to a point intersecting the NS section line between secs. 16 and 17.
2 of 8	38S	47E	W.M.	16	Thence northeasterly along the identifiable rim through the SW of SW, NW of SW, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 9 and 16.
2 of 8	38S	47E	W.M.	9	Thence northerly along the identifiable rim through the SE of SW, SW of SE, SE of SW, NW of SE, NE of SW, NW of SW, SW of NW, and NW of NW to a point intersecting the EW section line between secs. 4 and 9.

2 of 8	38S	47E	W.M.	4	Thence northerly along the identifiable rim through the SW of SW to a point intersecting the NS section line between secs. 4 and 5.
2 of 8	38S	47E	W.M.	5	Thence northwesterly along the identifiable rim through the SE of SE, SW of SE, NW of SE, NE of SW, SE of NW, SW of NW, and NW of NW to a point intersecting the NS section line between secs. 5 and 6.
2 of 8	38S	47E	W.M.	6	Thence northwesterly along the identifiable rim through the NE of NE, SE of NE, NE of NE, and NW of NE to a point intersecting the EW section line between secs. 6 (T38S, R47E, WM) and 31 (T37S, R47E, WM).
2 & 3 of 8	37S	47E	W.M.	31	Thence northwesterly along the identifiable rim through the SW of SE, SE of SW, SW of SE, NW of SE, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 30 and 31.
2 & 3 of 8	37S	47E	W.M.	30	Thence northerly along the identifiable rim through the SE of SW, NW of SW, SW of NW, SE of NW, and NW of NE to a point intersecting the EW section line between secs. 19 and 30. Thence east to the NE corner of the NW of NE.
2 of 8	37S	47E	W.M.	19	Thence north across Little Spring Creek to the identifiable rim. Thence northwesterly through the SW of SE, NW of SE, NE of SE, SE of NE, and NE of NE to a point intersecting the EW section line between secs. 18 and 19.
2 of 8	37S	47E	W.M.	18	Thence northeasterly along the identifiable rim through the to a point intersecting the EW section line between secs. 17 and 18.
2 of 8	37S	47E	W.M.	17	Thence northeasterly along the identifiable rim through the SW of SW, NW of SW, SE of NW, NE of NW, SE of NW, and NE of NW to a point intersecting the NS section line

					between secs. 8 and 17.
1 & 2 of 8	37S	47E	W.M.	8	Thence northerly along the identifiable rim through the SE of SW, NE of SW, NW of SE, SE of NW, SW of NE, and NW of NE to a point intersecting the EW section line between secs. 5 and 8.
1 of 8	37S	47E	W.M.	5	Thence northeasterly to the NE corner of the SE of SE.
1 of 8	37S	47E	W.M.	4	Thence northeasterly to the center of the NW of SW. Thence northeasterly to the NE corner of the NW of NW. Thence east to the identifiable rim of Toppin Creek. Thence southeasterly along the identifiable rim through the NE of NE to a point intersecting the NS section line between secs. 3 and 4.
1 of 8	37S	47E	W.M.	3	Thence southeasterly along the identifiable rim of Toppin Creek through the NW of NW, SW of NW, NW of SW, NE of SW, and SE of SW to a point intersecting the EW section line between secs. 3 and 10.
1 & 2 of 8	37S	47E	W.M.	10	Thence southeasterly along the identifiable rim through the NW of NE, NE of NW, NW of NE, SW of NE, NW of NE, NE of NE, and SE of NE to a point intersecting the NS section line between secs. 10 and 11. Thence south to the NE corner of the SE of SE.
1 & 2 of 8	37S	47E	W.M.	11	Thence southeasterly along the identifiable rim through the SW of SW to a point intersecting the EW section line between secs. 11 and 14.
2 of 8	37S	47E	W.M.	14	Thence along the identifiable rim through the NW of NW, and NE of NW to a point intersecting the EW section line between secs. 11 and 14.
2 of 8	37S	47E	W.M.	11	Thence along the identifiable rim through the SE of SW to a point

					intersecting the EW section line between secs. 11 and 14.
2 of 8	37S	47E	W.M.	14	Thence southeasterly along the identifiable rim through the NE of NW, NW of NE, SW of NE, NW of SE, SW of SE, SE of SE, and SW of SE to a point intersecting the EW section line between secs. 14 and 23. Thence east across Toppin Creek to the east identifiable rim. Thence northerly through the SE of SE, NW of SE, SW of NE, SE of NE, NE of NE, and NW of NE to a point intersecting the EW section line between secs. 11 and 14.
1 & 2 of 8	37S	47E	W.M.	11	Thence northwesterly through the SW of SE, SE of SW, NE of SW, NW of SW, SW of NW, and NW of NW to a point intersecting the EW section line between secs. 2 and 11.
1 of 8	37S	47E	W.M.	2	Thence northwesterly along the identifiable rim through the SW of SW to a point intersecting the NS section line between secs. 2 and 3.
1 of 8	37S	47E	W.M.	3	Thence northwesterly along the identifiable rim through the SE of SE, SW of SE, NW of SE, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 3 (T37S, R47E, WM) and 34 (T36S, R47E, WM).
1 of 8	36S	47E	W.M.	34	Thence northwesterly along the identifiable rim through the SW of SW, NW of SW, and SW of NW to a point intersecting the NS section line between secs. 33 and 34.
1 of 8	36S	47E	W.M.	33	Thence northwesterly along the identifiable rim at the confluence of Toppin Creek and the West Little Owyhee River, through the SE of NE, and NE of NE to a point intersecting the EW section line between secs. 28 and 33.
1 of 8	36S	47E	W.M.	28	Thence northerly along the identifiable rim through the SE of

					SE, SW of SE, NW of SE, SW of NE, and NW of NE to a point intersecting the EW sec line between secs. 21 and 28.
1 of 8	36S	47E	W.M.	21	Thence northerly along the identifiable rim through the SW of SE, NW of SE, and NE of SW to the center of the township. Thence northeasterly to the NE corner of the township.
1 of 8	36S	47E	W.M.	16	Thence north to the NE corner of the SE of SE (the border of the Owyhee Wild and Scenic River). Thence along the identifiable rim through the NE of SE, and NW of SE to the EW center line of the S 1/2. Thence west to the NE corner of the SE of SW.

APPENDIX B

LEGAL DESCRIPTIONS OF PROPOSED ADMIN. BOUNDARIES NORTH FORK OWYHEE RIVER

MAP No.	TOWNSHIP	RANGE	MERIDIAN	SECTION	DESCRIPTION
1 of 2	34S	46E	W.M.	25	Beginning at the Oregon-Idaho State line, thence traverse the identifiable rim through lot 2 to a point intersecting the North-South (NS) section line between secs. 25 and 26.
1 of 2	34S	46E	W.M.	26	Thence along the identifiable north rim through the SE of NE, SW of NE, NW of NE, NE of NW, SE of NW, NE of SW, and NW of SW to a point intersecting the NS section line between secs. 26 and 27.
1 of 2	34S	46E	W.M.	27	Thence along the identifiable rim through the NE of SE, NW of SE, NE of SW, and SW of NW to a point intersecting the NS section line between secs. 27 and 28.
1 of 2	34S	46E	W.M.	28	Thence along the identifiable rim through the SE of NE, SW of NE, and SE of NW. Thence north along the east identifiable rim of Cherry Creek SW of NW, and NW of NW to a point intersecting the East-West (EW) section line between secs. 21 and 28.
1 of 2	34S	46E	W.M.	21	Thence along the identifiable east rim of Cherry Creek through the SW of SW, SE of SW, NE of SW, NW of SE, SE of NW, and NE of NW. Thence west across Cherry Creek to the west identifiable rim. Thence south along the west identifiable rim of Cherry Creek SE of NW, NE of SW, SE of SW, and SW of SW to a point intersecting the NS section line between secs. 20 and 21.
1 of 2	34S	46E	W.M.	20	Thence along the identifiable west rim of Cherry Creek to the EW section line between secs. 20 and 29.

1 of 2	34S	46E	W.M.	29	Thence south along the identifiable rim of Cherry Creek through the NE of NE, and SE of NE. Thence west along the identifiable rim of the North Fork of the Owyhee River through the NE of SE, NW of SE, NE of SW, and NW of SW to a point intersecting the NS section line between secs. 29 and 30.
1 of 2	34S	46E	W.M.	30	Thence along the identifiable rim through the NE of SE, NW of SE, and SE of SW to a point intersecting the EW section line between secs. 30 and 31.
1 of 2	34S	46E	W.M.	31	Thence along the identifiable rim through lot 1 to a point intersecting the NS section line between secs 31 (T35S, R45E, and 36 (T34S, R45E, WM).
2 of 2	34S	45E	W.M.	36	Thence along the identifiable rim through the NE of NE, SE of NE, SW of NE, SE of NW, and SW of NW to a point intersecting the NS section line between secs. 35 and 36. Thence south approximately 0.50 mile along the NS section line between secs. 35 and 36.
2 of 2	34S	45E	W.M.	35	Thence west down the center of NE of SE, NW of SE, and NE of SW to the west section line. Thence south approximately 0.38 mile across the North Fork of the Owyhee River to the SE corner of SW of SW. Thence west approximately 0.06 mile along the EW section line between secs 35 (T34S, R45E, WM) and 2 (T35S, R45E, WM).
2 of 2	35S	45E	W.M.	2	Thence south approximately 0.13 mile to the west section line of the center of NW of NW. Thence east down the center of NW of NW, NE of NW, NW of NE, and NE of NE to a point intersecting the NS section line between secs. 1 and 2.
2 of 2	35S	45E	W.M.	1	Thence east down the center of NW of NW, NE of NW, NW of NE, and NE of NE to the NS section line between secs. 1 (T35S, R45E, WM) and 6 (T35S, R46E, WM).

1 & 2 of 2	35S	46E	W.M.	6	Thence east approximately 0.29 mile to the identifiable rim. Thence north along the identifiable rim through the NE of NW to the EW section line between secs. 6 (T35S, R46E, WM) and 31 (T34S, R46E, WM).
1 of 2	34S	46E	W.M.	31	Thence northeast along the identifiable south rim through the SE of SW, and SW of SE to the section line between secs. 6 (T35S, R46E, WM) and 31 (T34S, R46E, WM).
1 of 2	35S	46E	W.M.	6	Thence southerly along the identifiable rim through the NE of NE to the EW section line between secs. 6 (T35S, R46E, WM) and 31 (T34S, R46E, WM).
1 of 2	35S	46E	W.M.	31	Thence along the identifiable rim through the SE of SE to the NS section line between secs. 31 and 32.
1 of 2	34S	46E	W.M.	32	Thence along the identifiable rim through the SW of SW, NW of SW, SW of NW, NW of NW, NE of NW, NW of NE, and NE of NE to the NE corner of sec. 32.
1 of 2	34S	46E	W.M.	28	Thence along the identifiable rim through the SW of SW, SE of SW, SW of SE, and SE of SE to the NS section line between secs. 27 and 28.
1 of 2	34S	46E	W.M.	27	Thence along the identifiable rim through the SW of SW, and SE of SW to the EW section line between secs. 27 and 34.
1 of 2	34S	46E	W.M.	34	Thence along the identifiable rim through the NE of NW, NW of NE, SW of NE, NW of SE, NE of SE, SW of NE, NW of NE, and NE of NE to the EW section line between secs. 27 and 34.
1 of 2	34S	46E	W.M.	27	Thence along the identifiable rim through the SE of SE to the NS section line between secs. 26 and 27.
1 of 2	34S	46E	W.M.	26	Thence along the identifiable rim through the SW of SW to the EW section line between secs. 26 and 35.

1 of 2	34S	46E	W.M.	35	Thence along the identifiable rim through the NW of NW, NE of NW, NW of NE, SW of NE, and SE of NE to the NS section line between secs. 35 and 36.
1 of 2	34S	46E	W.M.	36	Thence along the identifiable rim through lot 2 to the Oregon-Idaho State line. Thence north approximately 0.06 mile. Thence west through lot 2 to the section line between secs. 35 and 36.
1 of 2	34S	46E	W.M.	35	Thence west along the identifiable rim through the SE of NE, NE of NE, NW of NE, and NE of NW to the EW section line between secs. 26 and 35.
1 of 2	34S	46E	W.M.	26	Thence along the identifiable rim through the SE of SW, NE of SW, SW of NE, NW of SE, and NE of SE to the section line between Secs. 25 and 26.
1 of 2	34S	46E	W.M.	25	Thence along the identifiable rim through lot 3 and lot 2 to the Oregon-Idaho border. Thence north approximately 0.13 mile.

APPENDIX C

LAWS, REGULATIONS AND OTHER REFERENCES

-- Wild and Scenic Rivers Act P.L. 90-542 (1968), as amended.

-- Federal Land Policy and Management Act (FLPMA), P.L. 94-579, October 1976.

-- Endangered Species Act, 1973.

-- Archaeological Resources Protection Act, 1979.

-- National Historic Preservation Act, 1966.

-- Taylor Grazing Act, 1934

-- Clean Water Act, 1979

-- The Federal Fish and Wildlife Coordination Act, 1958.

-- The Wilderness Act, P.L. 88-577, 1964.

-- The National Environmental Protection Act, 1969.

-- Interim Management Policy and Guidelines for Lands Under Wilderness Review, Bureau of Land Management, 1979, as amended

-- Oregon State Scenic Waterways Act, ORS 390.805 to 390.925, 1970.

-- Oregon Administrative Rules, Chapter 736, Division 40 - State Department of Parks and Recreation.

-- Owyhee Wild and Scenic River Study Final Report - Environmental Impact Statement, National Park Service, 1979.

-- Southern and Northern Malheur Resource Area Management Framework Plans, BLM, Vale District, 1983.

-- Southern Malheur Grazing Management Program Environmental Impact Statement, BLM, Vale District, 1983.

-- Southern Malheur Rangeland Program Summary, BLM, Vale District, 1984.

-- Oregon State Comprehensive Outdoor Recreation Plan (SCORP),

-- Malheur County Comprehensive Land Use Plan and Ordinances.

-- Owyhee Canyonlands Wilderness Environmental Impact Statement, BLM, Boise District, Idaho, 1985.

-- National Wild River Management Plan - Owyhee River, Final, BLM, Vale District, 1986.

-- Oregon Wilderness Final Environmental Impact Statement, BLM, Oregon, 1989.

-- Oregon Statewide Assessment of Nonpoint Sources of Water Pollution, Oregon Department of Environmental Quality, Water Quality Division, Portland, Oregon, 1988.

-- Water Resources Data, Oregon, Water Year 1990, Volume 1, USGS Water Data Report OR-90-1, USGS, Water Resources Division, Portland, Oregon. 1991

-- West Little Owyhee National Wild River Resource Assessment, BLM, Vale District, 1991.

-- North Fork Owyhee National Wild River Resource Assessment, BLM, Vale District, 1991.

-- Preliminary Draft Eastern Oregon Scenic Waterways Flow Assessment, Grande Ronde River, Wallowa River, Minam River, Owyhee River; Oregon Water Resources Department, Salem, Oregon; December 1991.

APPENDIX D

BLM Oregon/Washington
Wild River Management Guidelines

Management Objective for Wild River Areas

Management of wild river area should give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting.

Management Standards for Wild River Areas

Allowable management practices might include construction of minor structures for such purposes as improvement of fish and game habitat; grazing; protection from fire, insects, or disease; and rehabilitation or stabilization of damaged resources, provided the area will remain natural appearing and the practices or structures will harmonize with the environment. Developments such as trail bridges, occasional fencing, natural appearing water diversions, ditches, flow measurement or other water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct and adverse effect on the natural character of the river area. The following program management standards apply:

a. **Forestry Practices:** Cutting of trees will not be permitted except when needed in association with a primitive recreation experience (such as clearing for trails) and for visitor safety or to protect the environment (such as control of fire). Timber outside the boundary, but within the visual corridors should, where feasible, be managed and harvested in a manner to provide special emphasis to visual quality.

b. **Water Quality:** Water quality will be maintained or improved to meet Federal criteria or Federally approved state standards. (River management plan shall prescribe a process for monitoring water quality on a continuing basis.)

c. **Hydroelectric Power and Water Resource Development:** No development of hydroelectric power facilities would be permitted. No new flood control dams, levees, or other works are allowed in the channel or river corridor. All water supply dams and major diversions are prohibited. The natural appearance and essentially primitive character of the river area must be maintained. Federal agency groundwater development for range, wildlife, recreation or administrative facilities may be permitted if there are no adverse affects on outstandingly remarkable river related values.

d. **Mining:** New mining claims and mineral leases are prohibited within 1/4 mile of the river. Valid existing claims would not be abrogated and, subject to existing regulations (e.g. 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the rivers included in the National System, existing mining activity would be allowed to continue. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation, pollution, and visual impairment. Reasonable mining claim and mineral lease access will be permitted. Mining claims beyond 1/4 mile of the river, but within the wild river area boundary, and perfected after the effective date of the wild river designation can be patented only as to mineral estate and not to surface estate.

e. **Road and Trail Construction:** No new roads or other provisions for overland motorized travel would be permitted within a narrow incised river valley or, if the river valley is broad, within 1/4 mile of the river bank. A few inconspicuous roads leading to the boundary of the river area and unobtrusive trail bridges may be permitted.

f. **Agricultural Practices and Livestock Grazing:** Agricultural use is restricted to a limited amount of domestic livestock grazing and hay production to the extent currently being practiced. Row crops are prohibited.

g. **Recreation Facilities:** Major public use areas, such as campgrounds, interpretive center, or

administrative headquarters are located outside wild river areas. Simple comfort and convenience facilities, such as toilets, tables, fireplaces, shelters, and refuse containers may be provided as necessary within the river area. These should harmonize with the surroundings. Unobtrusive hiking and horseback riding trail bridges could be allowed on tributaries, but would not normally cross the designated river.

h. **Public Use and Access:** Recreation use including, but not limited to, hiking, fishing, hunting, and boating is encouraged in wild river areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance wild river values.

i. **Rights-of-Way:** New transmission lines, natural gas lines, water lines, etc., are discouraged unless specifically prohibited outright by other plans, orders or laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on wild river area related values and fully evaluated during the site selection process.

j. **Motorized Travel:** Motorized travel on land or water could be permitted, but it is generally not compatible with this classification. Normally, motorized use will be prohibited in a wild river area. Prescriptions for management of motorized use may allow for search and rescue and other emergency situations.

APPENDIX E

Oregon State Scenic Waterway Program

BACKGROUND

The Oregon Scenic Waterway Act was established by a ballot initiative in 1970. The original Oregon Scenic Waterways system created by the Act included 496 free-flowing miles of six rivers. The Owyhee is one of the six rivers that were first included in the system.

Rivers can be added to the system through designation by the Governor or the legislature. Such actions have added significant mileage of five rivers, as well as Waldo Lake, to the Scenic Waterways system since passage of the original Act.

Rivers can also be added to the system by the citizens of Oregon. In 1988, Oregon voters passed the Oregon Rivers Initiative (Ballot Measure #7), which added 573 river miles to the system. There are now one lake, and segments of 19 rivers (1,148 miles), in the State Scenic Waterways system.

PROGRAM GOALS

The scenic waterway program promotes cooperative protection and wise use of rivers in the system by all agencies (federal, state, and local), individual property owners, and recreation users. Program goals are:

- To protect the free-flowing character of designated rivers for fish, wildlife, and recreation. No dams, reservoirs, impoundments, or placer mining activities are allowed on scenic waterways.

- To protect and enhance scenic, aesthetic, natural, recreation, scientific, and fish and wildlife values along scenic waterways. New development or changes of existing uses proposed within a scenic waterway are reviewed before they may take place.

- To protect private property rights. The Act discourages unsightly structures or inappropriate development that could be a nuisance to neighboring landowners or even depreciate property values. It prohibits pollution and the disturbance of adjacent surface lands by placer mining. It also prohibits public use of private property without explicit consent of the landowner.

- To promote expansion of the scenic waterway system. The Act sets up a process for adding new rivers to the system and established criteria for candidate rivers.

- To encourage other local, state, and federal agencies to act consistently with the goals of the program. Oregon State Parks reviews plans and decisions made by other agencies to ensure consistency with the scenic waterways program.

ADMINISTRATION

Scenic waterways are administered under the authority of the Oregon State Parks and Recreation Commission (ORS 390-805 or 390-925). Administrative rules (OAR 736-40-030 and 736-40-035) have been adopted as general land management guidelines. In addition to the general land management rules, specific rules are generated for management of adjacent lands along each river segment in the system. These rules are created through the management planning process, and tailored to the actions necessary to maintain the existing character of the designated river corridor.

The Act and the Commission's rules require the evaluation of proposed land use changes within one-quarter mile from each side of the river for their potential impacts on aesthetic and scenic values, as viewed from the river Property owners wanting to build roads or houses, develop mines, harvest timber, or other similar projects, must provide written notification to the Oregon State Parks and Recreation Department. Parks evaluation of the project will be coordinated with other natural resource agencies (federal and state) having regulatory responsibility and with the local

jurisdiction. Parks relies on its river classification and land management rules for each segment of the scenic waterway to determine whether the proposed project is incompatible or inconsistent with the designated classification. State Parks will work with the landowner to reach a mutually satisfactory resolution of any conflicts. Where such a resolution cannot be reached, the Commission must decide, within one year of the original notification, whether to pay the property owner for the land or the development rights.

Other local and state agencies must comply with the scenic waterway law and rules. Parks also works closely with federal agencies to assure their actions are compatible with scenic waterway law, rule, and resource management recommendations.

In the case of the Owyhee River, the scenic waterway management program involves the classification of the entire waterway in its two segments as"Natural River Area" as indicated on page 4. Also, there is one land management rule specific to the Owyhee (page 4) in addition to the following general land management rules.

GENERAL RULES OF LAND MANAGEMENT

736-40-035 These rules and regulations governing the use of related adjacent lands and improvements made on or to these lands apply to all designated scenic waterways. Land management on scenic waterways includes, but is not limited to, the following examples:

(1) Timber Harvest: The forest cover on related adjacent land is a part of the scenic beauty of the waterway and notification of planned timber harvest operations must be given to the Commission one year prior to commencement. the notification must include a plan specifying timber to be cut, road locations, logging methods, slash cleanup, soil stabilization, revegetation measures and any other details as the Commission may require.

(2) Tree Cutting: No person shall cut any living tree within a scenic waterway without prior written notice except as provided in these rules.

(3) Grazing and Farming: Existing use in the form of grazing or farming of the related adjacent land is a part of the scenic beauty of the waterway. Notification is not required for:

(a) Construction of fences;

(b) Maintenance of farm buildings, fences or appurtenances necessary to existing use;

(c) Laying or irrigation lines;

(d) Pumphouse construction, if not in violation of OAR 736-40-0303(5);

(f) Crop rotation;

(g) Variations in grazing land management;

(h) Placing of grazing land under cultivation, except within classified natural river areas named in OAR 735-40-045 through 736-40-075;

(i) Construction of silos and grain storage facilities, and other structures or buildings as are needed in connection with the existing use of the related adjacent land, if not in violation of OAR 736-40-030(5), except within classified natural river areas named in OAR 736-40-045 through 436-40-075;

(j) Cutting of danger trees. Notification is required for construction of new roads or improvement of existing roads.

(4)Suburban Housing: Notification is not required for:

(a) Maintenance of existing homes in a manner compatible with these rules and regulations;

(b) Modifications to existing single family dwellings, if not in violation of OAR 736-40-030(5);

(c) Construction of garages necessary to the use of existing homes, if not in violation of OAR 736-40-030(5);

(d) Changes in or additions to homesite landscaping which do not impair vegetation screening structures from view from the river;

(e) Construction of protective fences necessary to use of the home;

(f) Cutting of firewood for occupant's dwelling;

(g) Cutting of danger trees. Notification is required for construction of new roads or improvement of existing roads.

(5) Prospecting, Mining, Dredging, and Quarrying;

(a) All prospecting, mining, dredging, and quarrying operations, including removal or movement of gravel, rocks and sand within related adjacent lands, require notification to the Commission as prescribed herein;

(b) Such notification shall include plans to

insure that debris, silt, chemicals or other materials, shall not be discharged into or allowed to reach the waters within a scenic waterway and that the natural beauty of the scenic waterway shall not be impaired substantially.

(6) Transportation Facilities and Utilities:

(a) No roads, railroads or other facilities for transportation or utilities shall be constructed or improved within a scenic waterway without notification to the Commission as prescribed by the Act and herein;

(b) The Commission, whenever practicable, will require the sharing of land and airspace by such facilities and utilities. All permissible transportation facilities and utilities shall be so located as to minimize impairment of the natural beauty of the scenic waterway. For example, it will be desirable to place electrical and telephone liens underground wherever reasonably practicable.

(7) Structures, Buildings, and Other Improvements: Except as provided in OAR 736-40-030(5), sections (3) and (4) of this rule and OAR 736-40-045 through 736-40-075, no structures, buildings, or other improvements shall be made, erected or placed on related adjacent lands without notification to the Commission as prescribed by the Act and herein. Permitted new structures, buildings, or other improvements on related adjacent lands which can be seen from the waters within a scenic waterway shall:

(a) Be of such design and be constructed of such materials as to be unobtrusive and compatible with the scenic qualities of the area. For example, the following shall apply:

(A) All structures shall be finished inmuted tones appropriate to their natural surroundings;

(B) No large areas, including roofs, shall be finished with white or bright colors or reflective materials;

(C) Except for large farm buildings such as barns, metal siding or roofing shall not be used;

(D) No structures shall exceed 30 feet in height from natural grade on a side facing the river;

(E) All structures shall be so designed and constructed that little or no soil is left exposed when construction is completed.

(b) Be located in such a way that topography and natural vegetation make them as inconspicuous as reasonably practicable, and in no case obtruding on the view from the river. The Commissions may require that additional vegetative screening be established and maintained. In such event, it shall be evergreen, wherever practicable, and compatible with natural growth in the area.

(8) Mobile homes, modular residential structures, house trailers, campers and similar structures and vehicles. Mobile homes, modular residential structures, house trailers, campers, motor homes and the like shall not be established as dwellings, either permanent, (or) seasonal or temporary, within related adjacent lands unless they are entirely concealed from view from the waters within a scenic waterway by topography, except, that those mobile homes, modular residential structures and house trailers that are at least 20 feet wide, with exterior dimensions, less hitch, of 800 square feet, may be permitted under these rules subject to the same requirements and standards set forth in the previous section relating to criteria for review for structures and improvements that are visible from the waters within a scenic waterway. Additionally, except when a mobile home, modular residential structure, house trailer or the like is not set on a ground-level foundation, full skirting shall be installed which in design, color and texture appears to be an integral part of the exterior of the structure:

(a) For purposes of these rules, a structure is a mobile home, modular residential structure, house trailer, camper or motor home if it is used, designed or intended to house persons, and is transported to the site in a state of substantial prefabrication. Once a structure fulfills this test, it shall remain subject to the rule regardless of whether the wheels or other temporary assembly have been removed or detached, and regardless of whether the structure is subsequently relocated;

(b) Within public recreation sites and transient public trailer parks where travel trailers, campers, motor homes and similar vehicles are permitted by the public agency, firm or individual maintaining the facility, their transient, short-term use by travelers is allowed, but they shall not be left on the site during their user's absence of more than three (3) days's duration.

(9) Maintenance of Structures and Improvements: Owners and users of existing structures and other improvements shall maintain them and their surroundings in a manner and condition in harmony with the environment,

compatible with the objectives set forth in these rules and regulations for the classified river area in which they lie, and without impairing substantially the natural beauty of the scenic waterway. The existing color of such structures may be maintained.

(10) Replacement of Existing Structures and Improvements: Replacement of existing structures and improvements including those lost by fire, flood or other casualty will be permitted, provided the new structure or improvement is in compliance with provisions of the Act and these rules and regulations. Notification procedures et forth in OAR 736-40-040 and Commission approval are required.

(11) Advertising: No signs or other forms of outdoor advertising that are visible from waters within a scenic waterway shall be constructed or maintained. Property protection signs (No Hunting, No Trespassing, et cetera) are exempted.

(12) Erosion Protection: The Commission recognizes that erosion protection work and maintenance may be necessary on riverbanks and related adjacent lands along the scenic waterways. Notification, which shall include plans to protect the natural beauty of the scenic waterway, and Commission approval are required.

(13) Submerged and Submersible Lands:

(a) No dam or reservoir or other water impoundment facility shall be constructed or placer mining permitted on waters within scenic waterways. No water diversion facility shall be constructed or used except by right previously established or as permitted by the State Engineer;

(b) No bank protection works or dredging facility shall be constructed or used on such waters, except as permitted by the Director of the Division of State Lands and approved by the State Land Board.

(14)Emergencies:

(a) The owner or his authorized agent may act in emergencies without prior notice when necessary in the interest of public safety, or safety of his own property except that notice of any action taken shall be filed with the Commission not later than seven days following the commencement of the emergency procedures;

(b) The owner or his authorized agent must show that the emergency situation required immediate action to prevent immediate danger or damage. Such emergency procedures shall not be extended beyond the minimum necessary to accomplish the needed protection safely and shall be conducted throughout in such manner as to minimize impairment of the natural beauty of the scenic waterway. For example, car bodies and similar scrap or trash shall not be used as riprap.

(15) Solid Waste, Pollution and Sanitation: Owners, occupants and users of related adjacent land shall comply with the rules and regulations of the Department of Environmental Quality relating to solid waste control, water, air and noise pollution control and sewage disposal.

River Classification and Land Management Rule Specific to the Owyhee River Scenic Waterway

736-40-055 Natural River Area:

(1) The entire Owyhee River Scenic Waterway, in its two segments, is classified as a Natural River Area.

(2) In order to preserve the river and related adjacent lands in an essentially primitive condition, no new structures or improvements which are visible from the river, other than those erected or made in connection with the existing agricultural uses, or those needed for public outdoor recreation or for resource protection will be permitted. Commercial public service facilities, including resorts and motels, lodges and trailer parks, and additional dwellings which are visible from the river will not be permitted.

APPENDIX F

DEFINITIONS

FEDERAL DEFINITIONS

WILD RIVERS

The National Wild and Scenic River's Act established a National Wild and Scenic River's System to protect and enhance rivers and their immediate environments. This system has a classification designation for each river segment of either "wild", "scenic", or "recreational." All three rivers planned for within this management plan are classified as "wild."
Wild rivers are those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

STATE DEFINITIONS

NATURAL RIVER AREAS

Natural River Areas are those State Scenic Waterways or segments thereof that are generally inaccessible except by trail or the river, with related adjacent lands and shorelines essentially primitive. These represent vestiges of primitive America.

Natural River Areas may include an occasional lightly traveled road, airstrip, habitation or other kind of improvement already established, provided the effects are limited to the immediate vicinity.

Natural River Areas will be administered to preserve their natural, wild and primitive condition, essentially unaltered by the effects of man, while allowing compatible recreational uses, other compatible existing uses and protection of fish and wildlife habitat.

NONPOINT SOURCE POLLUTION

An activity, event, or structure creating a product or process which enters a waterbody by diffuse means and not through a pipe and causes a water quality or stream quality problem. Nonpoint sources include natural or human sources but are not limited to: farming of crops, livestock grazing, harvesting trees, building or road construction, mining floods, drought, water diversions, and city streets.

MODERATE WATER QUALITY PROBLEM

A stream or water quality problem which interferes with the desired uses of the water body and with the normal life history or composition of acquatic populations.

SEVERE PROBLEM

A stream or water quality problem which causes substantial or nearly complete interference with the beneficial uses or opportunities to use the water.

SPECIFIC DATA

Existing information or data derived through documentation of a specific stream or water quality condition such as a documented reduction in a given fish population resulting from a dicumented increased sediment load and the resultant silting of gravel bars. Specific data also refers to water quality data that demonstrates a trend towards degradation or water quality standards violation.

OBSERVATION ONLY

The act of visually observing a stream or water quality probelm but without specific data being collected to prove the effect on beneficial uses of the water.

APPENDIX G

Recreation Opportunity Spectrum

Description of Recreation Opportunity Spectrum Classes

The enclosed chart describes each of the six ROS classes in terms of: (1) experience opportunities; (2) setting opportunities, and (3) activity opportunities (see also Glossary of Terms). These descriptors provide a general overview of the opportunities included in each class. These overview statements do not describe each class in detail, but rather provide a point of departure from which the planner or manager can develop more precise prescriptions for each class based on specific situations encountered in field operations. The listing of activity opportunities is provided for illustrative purposes. It is not an all-inclusive list of activity opportunities on the public lands.

THE RECREATION OPPORTUNITY SPECTRUM CLASS DESCRIPTIONS

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Primitive	Opportunity for isolation from the sights and sounds of man, to feel a part of the natural environment, to have a high degree of challenge and risk, and to use outdoor skills.	Area is characterized by essentially unmodified natural environment of fairly large size. Concentration of users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Only facilities essential for resource protection are used. No facilities for comfort or convenience of the user are provided. Spacing of groups is informal and dispersed to minimize contacts between groups. Motorized use within the area is not permitted.	Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (nonmotorized craft).
Semi-Primitive Nonmotorized.	Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.	Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided for the protection of resource values and the safety of users only. Spacing of groups may be formalized to disperse use and limit contacts between groups. Motorized use is not permitted.	Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (nonmotorized craft).

THE RECREATION OPPORTUNITY SPECTRUM CLASS DESCRIPTIONS—*Continued*

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Semi-Primitive Motorized.	Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Explicit opportunity to use motorized equipment while in the area.	Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided for the protection of resource values and safety of users only. Spacing of groups may be formalized to disperse use and limit contacts between groups. Motorized use is permitted.	Same as the above, plus the following: ORV Use (4-WD, Dune Buggy, Dirt Bike, Snowmobile), Power Boating.
Roaded Natural	About equal opportunities for affiliation with other user groups and for isolation from sights and sounds of man. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. Practice of outdoor skills may be important. Opportunities for both motorized and nonmotorized recreation are present.	Area is characterized by a generally natural environment with moderate evidence of the sights and sounds of man. Resource modification and utilization practices are evident, but harmonize with the natural environment. Concentration of users is low to moderate with facilities sometimes provided for group activity. On-site controls and restrictions offer a sense of security. Rustic facilities are provided for user convenience as well as for safety and resource protection. Conventional motorized use is provided for in construction standards and design of facilities.	All activities listed previously. plus the following: picnicking rock collecting, wood gathering auto touring, downhill skiing snowplay, ice skating, water skiing and other water sports hang gliding, interpretive use. rustic resorts and organized camps.
Rural.....	Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities These factors are generally more important than the natural setting. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant, except in those activities involving challenge and risk.	Area is characterized by substantially modified natural environment. Resource modification and utilization practices are obvious. Sights and sounds of man are readily evident, and the concentration of users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for specific activities. Developed sites, roads and trails, are designed for moderate to high use. Moderate densities are provided far away from developed sites. Facilities for intensive motorized use are available.	All activities listed previously, plus the following: competitive games, spectator sports, bicycling, jogging, outdoor concerts, and modern resorts.

THE RECREATION OPPORTUNITY SPECTRUM CLASS DESCRIPTIONS—*Continued*

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Modern Urban	Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities. Experiencing the natural environment, and the use of outdoor skills are largely unimportant.	Area is characterized by a highly modified environment, although the background may have natural elements. Vegetation is often exotic and manicured. Soil may be protected by surfacing. Sights and sounds of man, on-site, predominate. Large numbers of users can be expected. Modern facilities are provided for the use and convenience of large numbers of people. Controls and restrictions are obvious and numerous. Facilities for high intensity motor use and parking are present with forms of mass transit often available.	All activities listed previously.

APPENDIX H

PLANNING PARTICIPANTS/CONSULTATION & COORDINATION

BLM Management Participation

Jim May - District Manager, Vale

Geoff Middaugh - Associate District Manager, Vale

Dave Atkins - Area Manager, Jordan Resource Area, Vale

Rich Conrad - Acting Area Manager, Jordan Resource Area, Vale

Ralph Heft - Area Manager, Malheur Resource Area, Vale

Donna Webb - Assistant District Manager, Resources, Vale

BLM Staff Participation

Cathi Wilbanks - Outdoor Recreation Planner, Plan Lead

Robert Alward - Outdoor Recreation Planner

Alice Bronsdon - Cultural Resource Specialist

Steve Christenson - Range Conservationist

Rod Coleman - Wild Horse Specialist

Rich Conrad - District Outdoor Recreation Planner

Randy Eyre - Range Conservationist

Jean Findley - District Botanist

Lynne Forre - Resource Assistant

Tom Forre - Range Conservationist, Ecologist

Gary Guymon - Range Conservationist

Cliff Harvey - Recreation Technician

Bill Holsheimer - District Geologist

Robert Kindschy - Wildlife Biologist

BLM Staff Participation Cont.

Rich Law - River Ranger

Tom Miles - Supervisory Range Conservationist

Vern Pritchard - District Engineer

Charlene Rogers - Range Conservationist

Phil Rumpel - District Range Conservationist

Sheldon Saxton - Realty Specialist

Jack Wenderoth - District Hydrologist

Ken White - State Office Outdoor Recreation Planner

Jeff Wilbanks - River Manager and Planning and Environmental Coordinator

Key Planning Group

Melinda Allan - River enthusiast, noncommercial

Bruce Anderson - River enthusiast, noncommercial

Jim Anderson - Rancher, Land owner

Wayne Bowers - Fishery Biologist, Oregon Department Fish and Wildlife

John Bennedict - Outdoor Recreation Planner, Owyhee R.A., Boise BLM

Alice Elshoff - Oregon Natural Desert Association

John Garren - National Organization for River Sports

Ken Haylett - River shuttles, commercial

Ken Helfrich - Commercial outfitter, Oregon Guides and Packers Rep.

Ray Huff - Malheur County Planning

Jerry Hughes - River enthusiast, commercial outfitter

Wes and Ilea Jones - Local public land user (recreation)

Tim Lequerica - Rancher, Land owner

John Lilly - Oregon Division of State Lands, Salem

Burton Lewis - Oregon Division of State Lands, Bend

Key Planning Group Cont.

Duncan MacKenzie - Rancher, Land owner

Laz Mendieta - Rancher, Land owner

E. Charles Meslow - River enthusiast

Gary Miniszewski - River Planner, Oregon State Parks and Recreation Dept.

Bill Olsen - Wildlife Biologist, Oregon Department Fish and Wildlife

Oregon Natural Resources Council

Oregon Rivers Council

Mike Quigley - Northwest Rafters Association

Lolla Sept - Bureau of Reclamation, Boise, Idaho

Wayne Shuyller - Oregon State Marine Board

Joe Walicki - Sierra Club Rep.

Michelle Wilson - Wilderness Society Rep.

Other Consultation & Coordination

Bill Fujii - Oregon Water Resources Department

Ray Perkins - Oregon Department of Fish and Wildlife

Chris Bengoa - Lucky Seven Ranch

Kimball Wilkinson - Wilkinson Ranches

John Beal - Malheur County Planning

Gerry Meyer - Outdoor Recreation Planner, Baker Resource Area, Oregon

Steve Jakubowics - Bureau of Reclamation, Boise, Idaho

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

☆ U.S. GOVERNMENT PRINTING OFFICE: 1992—691-114/61,603 REGION NO. 10

WER'S CARD

1992
i.
c river draft
an /

ER	OFFICE	DATE RETURNED

(Continued on reverse)

F 882 .08 W553 1992
Wilbanks, Cathi.
Wild and scenic river draft
management plan /

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VALE DISTRICT OFFICE
100 OREGON STREET
VALE, OREGON 97918

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

Forwarding and
Address Correction Requested

FIRST CLASS MAIL
POSTAGE & FEES PAID
Bureau of Land Management
Permit No. G-76